



# **HANSRAJ COLLEGE**

## **UNIVERSITY OF DELHI**

### **Self Study Report 2015**



**SUBMITTED TO  
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL,  
BANGALORE**



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### PREFACE

Any sort of self-study report is always a long-drawn process of introspection and retrospection. On the one hand one must turn inwards to seek deep into the motivations behind one's actions and on the other hand there is the impulse to dive into the history of the institution and look for moments of utter perfection or humble correction. The act of researching for and formulating the report has been a similar exercise. Across my long tenure in this college, we have seen it go through the various vicissitudes of life: what the college has emerged as today is a product of all those lessons.

Hansraj College, despite all the modern amenities which it has kept adding to its repertoire since its inception, has always sought to stay rooted to its indigenous Vedic origins, devoted to the cause of social and spiritual well-being of the community. It is therefore of utmost importance that as stakeholders in that community we engage in some sort of self-analysis about our capacities and shortcomings, enriching the former and seeking to overcome the latter. The meticulous and rigorous work of the entire college community that has gone behind the production of this report is testimony to the collective sense of responsibility towards the society and the self that the institution has inculcated in us.

Hansraj College is a space of unparalleled self-growth. We have seen the institution make significant contribution to society in terms of producing dignitaries, scholars, intellectuals, and sports persons who have reached unequalled heights at a global level. Over the years we have steadily built up our infrastructure keeping in mind the best interests of our students and faculty: both in terms of convenience and research potential. The college has a well-stocked central library, departmental libraries for the science departments, and book banks for needy students. The college also has six well-equipped computer laboratories and eighteen state of the art science laboratories to promote an ethos of scientific enquiry and application based academic learning. Of course, our students have always brought us various laurels in diverse sports and extra-curricular activities. We try to facilitate their skills with the help of coaches and mentors and infrastructural components such as a vast play ground, an indoor sports complex, playrooms, an auditorium, an amphitheatre and the only electronic shooting range in the university. The auditorium has been recently re-furbished with air conditioning and ultra-modern seating and lighting arrangement which is perfect for enjoying the various performances that our students and the visiting artists put up. For smaller more intimate gatherings of specific academic nature we have an air-conditioned Seminar Room with a seating capacity of 120 people and high-level acoustic facilities.

The college is committed towards providing an environment which is sensitive to all forms of possible marginalizations. To begin with, we have an Enabling Unit led by some of our valued faculty members who ensure that the physically handicapped students do not face any kind of discrimination. We have lift and ramp facilities for their easy mobility as well. Our hostel accommodation for 200 students hailing from various walks of life is a modest setup charging a reasonable fee which both ensures the comfort of the students and nurtures in them the capacity for self-sustenance and sturdiness. We are a gender-sensitive community with great regard for the empowerment and security of our female students. Due to a lack of resources we still haven't been able to accommodate the women students of the college on campus: but in order to ensure their safety the college does not allow any academic or extra-



academic activity to extend beyond 5 pm in the evening. We also strive to preserve an academic ethos which does not allow students from the economically weaker sections of the society to feel abandoned, and hence there are multiple scholarships and free-ships which we make available for them on a need-cum-merit basis. We realize that we still have a long way to go and there will always be fresh challenges on our way; but the beginnings, no matter how modest, have been hopeful!

This report has been a journey through multiple realizations and resolutions towards the goal of further self-improvement: and having been a part of this college as a professor and now as the acting principal, I couldn't have hoped for a greater honour than to be following in the steps of my predecessors to lead our brilliant team of colleagues who have made these epiphanies possible. Meeting the expectations of the board of experts will be the most glorious feather in that crown.

Dr. Rama

Acting Principal

Hansraj College

University of Delhi

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### ACKNOWLEDGEMENT

The Steering Committee for the NAAC report for Hansraj College would be failing in its duty, if it does not place on record, the untiring contribution of the innumerable people, whose indefatigable efforts have gone into preparation of this report.

No great work is complete without admirable leadership. At the outset, the Committee would like to thank our recently appointed Principal Dr. Rama for her constant urging, support and guidance. The Committee also thankfully acknowledges the support from her office staff, led by Mr. Sushil Gupta, Mr. Bajrang and Mr. Dilip, for so graciously providing all the assistance needed at whatever odd hour in order to compile the report.

Experts like Dr. S. R. Arora, Dr. Manju Gupta and Professor Ramjilal Jangir have stood by us with their valuable advice, which saw this report through all its stages of taking the final shape.

It wouldn't have been possible to compile the colossal data for any of the individual criterion, had it not been for an extraordinarily efficient and co-operative team of non-teaching staff and technical assistance from our computer department. The Committee specifically shows appreciation to the tireless efforts of Mr. Abhishek Gabriel, Mr. Anil Tyagi and Mr. Rahul, who patiently bore all our demands at every point. We also recognize the involvement of student bodies, especially the Student Union and the office-bearers of the College Societies, for providing valuable inputs and feedback during the compilation.

The amazingly patient and meticulous Heads of all the departments, who ensured that the required information from the members of the department is submitted through the right channels at the right time in order to ensure an honest evaluation, deserve a special mention. They provided valuable inputs tirelessly throughout the process. This self-study would have been incomplete without their help.

The Committee is also beholden to the extremely dedicated Editorial Board, which ensured coherency and tautness of narratives throughout the report. With Dr. Meenakshi Malhotra at the helm of the team, along with the constant support of other senior members such as Mr. Sanjeev Nandan Prasad, Dr. Nivedita Sen and Dr. Sanjay Kumar, the others on the board including Arnab Dasgupta, Himanshu Kumar, Supurna Dasgupta and Vijay Kumar Mishra charged through many reams of drafts produced and re-produced in the process of perfecting the report.

We are also grateful to everyone both within and beyond the community of Hansraj College, who have contributed in any possible way towards the welfare of the college, who have spared even a moment to help in the preparation of this honest fruit of labour.

Last, but not the least, the Committee thanks NAAC for providing the College, an opportunity for introspection and to discover the areas of improvement.

The Committee very humbly admits that this enumeration has only been an attempt. We hope that any lapse will be treated as an honest mistake and attributed to the games that memory loves playing with us at the end of any such gigantic project.

Overwhelmed and ever indebted to one and all for the team work and collective labour.

Sanjay Batra	Alka Kacker	Mona Bhatnagar
Vijay Rani Rajpal	Krishan Sachdev	Baljeet Kaur
Anand Sonkar	Monika Koul	Preeti Dharmarha





## List of Abbreviations

ACBR	Ambedkar Centre for Biomedical Research
AIIMS	All India Institute of Medical Sciences
APA	Asian Polymeric Association
ASD	Academic Staff College
ASTP	Armenia Social Transition Project
AUD	Ambedkar University, Delhi
B. Com.	Bachelor of Commerce
B. Tech.	Bachelor of Technology
B.A.	Bachelor of Arts
B.Sc.	Bachelor of Science
BBC	British Broadcast Council
BITS	Birla Institute of Technology and Science
BSE	Bombay Stock Exchange
CAG	Comptroller and Auditor General of India
CBCS	Choice Based Credit System
CBI	Central Bureau of Investigation
CBSE	Central Board of Secondary education
CDA	Controller of Defence Accounts
CEO	Chief Executive Officer
CHS	Centre for Historic Studies
CIMA	Chartered Institute of Management Accounts
COL	Campus of Open Learning
CPC	Central Purchase Committee
CPDHE	Centre of Professional Development in Higher Education
CPF	Contributory Provident Fund
CRSI	Chemical Research Society of India
CRY	Child Rights and You
CSIR	Council of Scientific and Industrial
DAV	Dayanand Anglo Vedic
DBT	Department of Biotechnology
DCC	Discipline Centred Course
DIPAS	Defence Institute of Physiology and Allied Sciences
DIY	Do It Yourself
DMC	Dissection Monitoring Committee
Dr.	Doctor
DRDO	Defence Research and Development Organization
DSE	Delhi School of Economics
DST	Department of Science and Technology
DULS	Delhi University Library System
DUSU	Delhi University Students' Union
ECA	Extra Curricular Activities
EDC	Entrepreneurship Development Cell
EOC	Equal Opportunity Cell
FDI	Foreign Direct Investments
FDP	Faculty Development Program
FIP	Faculty Improvement Program
FIST	Funds for Improvement in Science and Technology Infrastructure
FMS	Faculty of Management Studies





FYUP	Four Year Undergraduate Programme
GB	Governing Body
GCNC	Green Chemistry Network Centre
GoI	Government of India
GPF	General Provident Fund
GRETl	Gnu Regression, Econometrics and Time Series Library
H	Honours
HR	Human Resources
HRDC	Human Resource Development Centre
IA	Internal Assessment
IARI	Indian Agriculture Research Institute
IBS	ICFAI Business School
ICGEB	International Centre for Genetic Engineering and Biotechnology
ICRIER	Indian Council for Research on International Economic Relations
ICS	Indian Civil Services
ICT	Information and Communication Technology
IDAS	Indian Defence Account Services
IDCC	Interdisciplinary Credit Course
IFPS	International Fluid Power Society
IGIB	Institute of Genomics and Integrated Biology
IIIT	Indian Institute of Information Technology
IIM	Indian Institute of Management
IISc	Indian Institute of Sciences
IISER	Indian Institute of Science Education and Research
IIT	Indian Institute of Technology
ILBS	Institute of Liver and Biliary Sciences
INR	Indian National Rupees
INSA	Indian National Science Academy
INSPIRE	Innovation in Science Pursuit for Inspired Research
IQAC	Internal Quality Assurance Cell
IQAS	Internal Quality Assurance System
IRIS	Integrated Risk Information System
ISAS	Indian Society of Analytical Scientists
ISR	Institutional Social Responsibility
IT	Information Technology
JNU	Jawaharlal Nehru University
KPI	Key Performance Index
LAN	Local Area Network
LASTEC	Laser Science and Technology Centre
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LoI	Letter of Intent
M. A.	Masters of Arts
M. Com.	Masters of Commerce
M. Phil.	Masters of Philosophy
M.B.E.	Masters of Business Economics
M.Sc.	Masters of Science
MCA	Masters in Computer Applications
MHRC	Mahatma Hansraj Research Centre
MIL	Modern Indian Languages
MoU	Memorandum of Understanding



MRI	Magnetic Resonance Imaging
MRP	Major Research Project
MRTTP	Monopolies Restricted Trade Practices Act
N/A	Not Applicable
NAAC	National Assessment and Accreditation Council
NBPGR	National Bureau of Plant Genetic Resources
NBRC	National Brain Research Centre
NCBS	National Centre for Biological Sciences
NCC	National Cadet Corps
NCCS	National Centre for Cell Sciences
NCR	National Capital Region
NCWEB	Non Collegiate Women's Education Board
NET	National Eligibility Test
NGO	Non-Government Organization
NII	National Institute of Immunology
NIPGR	National Institute of Plant Genome Research
NIRRH	National Institute for Research in Reproductive Health
NMPE	Network Management and Protocol Entity
NMR	Nuclear Magnetic Resonance
NRI	Non Resident Indian
NSS	National Service Scheme
OBC	Other Backward Classes
OI	Orthopaedic Impairment
OPAC	Online Public Access Catalogue
OUP	Oxford University Press
PCR	Police Control Room
PG	Postgraduate
Ph.D.	Doctorate of Philosophy
PMJDY	Pradhan Mantri Jandhan Yojana
Prog.	Program
PwD	People with Different Abilities
PYEP	Prudential Youth Entrepreneurship Program
RBI	Reserve Bank of India
SC	Scheduled Caste
SCRF	Synapse Clinical Research Foundation
SERB	Science and Engineering Research Board
SERB	Science and Engineering Research Board
SLET	State Level Eligibility Test
SME	Small and Medium Sized Enterprises
SPIC MACAY	Society for Promotion of Indian Classical Music and Cultural Amongst the Youth
SPSS	Statistical Package for the Social Sciences
SSR	Self Study Report
ST	Scheduled Tribe
STATA	Data Analysis and Statistical Software
SVEEP	Systematic Voters Education and Electoral Participation
SWOC	Strengths/ Weakness/ Opportunities and Challenges
TERI	The (Tata) Energy Research Institute
TIME	Triumph Institute of Management Education Pvt. Ltd.
TOEFL	Test of English as a Foreign Language
UG	Undergraduate
UGC	University Grants Commission



UPS	Uninterrupted Power Supply
USAID	United States Agency for International Development
USIC	University Science Instrumentation Centre
VI	Visual Impairment
VVRI	Vishveshvaranand Vedic Research Institute
WDC	Women Development Cell
WiFi	Wireless Fidelity



## **EXECUTIVE SUMMARY**

### **Criterion I:**

Hansraj College, a constituent college of University of Delhi, has been striving since 1948 to provide holistic education that can serve as a catalyst for dismantling the cobwebs of ignorance and illiteracy. Our objective is to contribute to the development of individuals who are morally upright, intellectually well-informed, socially concerned, emotionally balanced, physically well-developed and culturally accomplished. This is sought to be accomplished in a framework that homogenizes the global knowledge frontier while remaining anchored to the Indian cultural moorings.

We are firm believers in the philosophy where values and attributes such as discipline, hard work, and intellectual curiosity interact with intellectual rigour in ways that are dynamically rewarding and hence indispensable tools for the pursuit of excellence. Maintenance of discipline therefore acquires top priority with teaching and administrative staff working in close sync to achieve the same. Talks and seminars relevant to specific disciplines serve to deepen the students understanding of the curriculum and thereby play a strongly and indispensably complementary role to class room teaching. The college aspires to inculcate the above values in both students and teachers. Meticulous planning with respect to workload, timetables and the academic calendar are ingrained in the work ethos at Hansraj. Teachers within a department are encouraged to teach new papers or switch papers so that intellectual stagnation does not occur. They are provided with international exposure through programmes such as the “Faculty Training Program” with the aim of understanding and learning the curriculum design and development of other universities, with which the University of Delhi has signed MOUs such as University of Nottingham, King’s College London, University of Edinburgh, etc.

The college provides a liberal and nurturing atmosphere for academic attainment. Every department is provided with ICT enabled classrooms that allow the teachers to go beyond the university prescribed curriculum and allow them to administer considerable academic flexibility. Skills so acquired considerably aid students’ progression to higher studies and employment. College has an enabling unit with a Braille library, computers, and other facilities like reader, writer, scanning, print out etc. to help physically challenged students. The Placement cell of the college facilitates interaction and connection with corporates, banks, and other consulting organizations like Deloitte, UBS Verity Knowledge Center etc. The college provides certificate courses in various areas such as foreign language courses, English courses and is also a teaching centre for NCWEB.

The faculty at Hansraj is highly accomplished yet constantly striving to achieve further excellence. Our faculty members are active members of the Board of Studies and various committees such as Committee of courses formed/established by the University of Delhi that are involved in designing the undergraduate courses. Most of our teachers are involved in research activity through Innovation Projects funded by UGC and undertake other research projects at an individual level. The college provides an institutional infrastructure in the form of various committees such as the Academic Affairs Committee for Addressing issues related to the effective delivery of the curriculum.



While academic excellence is of paramount importance to Hansraj, our commitment to a holistic approach to education makes us pay keen attention to sports and extracurricular activities. The college has been attracting considerable sports talent that has blossomed further under the guidance of an able sports department and a state of the art sports infrastructure. The college boasts of student and teacher societies spanning varied fields including Botany, English and Hindi Debating, English and Hindi Literary Societies, History Society, the very popular Swaranjali (the music society), Terpsichorean (choreography society), Dramatics, Sanskriti, Ordinateur (Computer Science), Commerce, Mathematics, Navankur, Economics Society, Environment Awareness and General Awareness. Further, N.S.S. and *Enactus* instill in students a sense of social responsibility and help them understand and find practical solutions to problems confronting individuals, groups and communities. This helps our students to bring about positive change in the society as they enthusiastically work towards spreading the message of peace, education, love and development. In addition, SPIC MACAY, a Society for Promotion of Indian Classical Music and Culture Amongst the Youth, has worked closely with our college, continuously inspiring our students to conserve and to promote India's rich culture and heritage.

The college has set up Internal Quality Assurance Cell (IQAC) which monitors and evaluates the quality of academic delivery and enrichment programmes offered by the college. This cell is entrusted with the responsibility of collecting feedback from stakeholders about the quality of curriculum delivery, the limitations, proposals for improvement etc. To obtain feedback on curriculum from all stakeholders, a link has been provided in the website. Feedback is analyzed and result is shared informally with the university. In addition, we do not understate the importance of informal feedback collection through fora such as the Hansraj college Alumni Association, the various departmental alumni associations etc. Also some faculty members routinely collect feedback from their students and use the same to improve academic outcomes.

### Criterion II:

Teaching-Learning at Hansraj College is an innovative blend of traditional and modern methodologies aimed at holistic growth of students. The focus of student-teacher interaction involves the exploration of multidisciplinary opportunities to bring out new perspectives and fresh thoughts in their field of knowledge.

Though Hansraj College is a natural choice for students owing to its reputation in University of Delhi, the college ensures the persistence of this publicity. This is evident through the increasing number of applications from students from all across the country over the years. The institution offers not only undergraduate and post graduate courses but also conducts part-time Certificate, Diploma and Advanced Diploma Courses in French & German Languages. The admissions to all these courses are made as per the official guidelines of the University of Delhi. The College's Admission Committee makes sure that the admission procedures are carried out in an organised and systematic manner. Special arrangements are made to place help desks for assisting students and parents in the admission procedures.

In recent years, the college has taken proactive steps to make the campus disabled friendly by constructing ramps and lifts. It has also made dedicated efforts to nurture and foster the cultural diversity by focusing on underserved sectors and communities of our society. To this end, it adheres to the inclusion policies as framed and designed by the Government of India



and the guidelines of the University of Delhi, both in letter and in spirit. It deserves special mention that the college pioneered small committees of teachers to look into the interests of students from the north-eastern states and to ensure a conducive environment for its women students long before these became statutory. The positive impact of these steps is clearly reflected in the vast demographic profile/s of student admission which may also be seen in the yearly charts regarding the same for the last four years.

The college is known also for its focus on co-curricular activities that are seen not as extra-curricular but as an integral part of the teaching methodology. This vision has helped the college to grow into an institution of excellence from a holistic perspective.

Managing the diversity amongst its students in terms of capabilities, talents, aspirations, background, personal resources and special needs is certainly a challenge. And the college takes this challenge very seriously. It not only provides a competitive environment but also strives to provide the requisite support to students to help them achieve their fullest potential. Besides being recognised for being the best-in-class faculty, offering a wide spread of course options, latest infrastructure, extra-curricular activities, sports facilities, various programs for societal contributions, Hansraj College stands out in extending personal attention to the needs of the students. The emphasis is not merely on scholastic achievements, but on an all-rounded development that involves understanding and sensitivity towards gender-equality, environment, and society. There are even programs that help underprivileged students through fee concessions and scholarships.

The college lays great emphasis on the quality of the teaching-learning process. Both the faculty and students are encouraged continuously to upgrade their skills by participating in various seminars, conferences and workshops. The college has created an environment where teaching is not regarded as pedagogy but as stimulation of rational mind. The teaching modes are made highly interactive by encouraging discussions, raising questions and debating ideas. This learning process offers students space for developing independent thought and also for sharing and exchange of ideas with peers. The students are encouraged to contact the faculty if they require any academic, personal or social support as faculty performs the role of not just a teacher but also a mentor and a guide.

The college has a Wi-Fi enabled campus with many ICT enabled classrooms. The institution has a well-equipped central library, online connection to the e-library of University of Delhi with separate study halls for the faculties and the students, all equipped with internet facility. In addition, there are separate departmental libraries for science courses.

Procedures are in place to ensure a timely completion of the syllabus within the framework of the academic calendar such as displaying timetable before the commencement of the next semester, monitoring the attendance of students on a monthly basis, preparing a detailed schedule for submitting the internal assessment of students, and arranging for replacements in case of leave or planned unavailability of any faculty member.

Hansraj College ensures the appointment of highly competitive teaching faculty within the framework of extant policies. Since these teachers serve as role models, influence career choices and enable students to reach their potential, college is very particular about the further growth of its faculty members through workshops, seminars, conferences, orientation and refresher courses. The faculty members are encouraged to update themselves about the latest research and technological advances to help them meet the challenges of newly





developed curriculum programmes. The college feels proud of the awards and recognition received by the various faculty members. A 360 degree students' feedback process has been initiated in the college in order to ensure the excellent results.

The college strictly follows evaluation guidelines of University of Delhi. All the departments of the college adopt a uniform policy of evaluation to present the progress of their respective class. The progressive performance of students is monitored through continual internal assessment and final examinations. In addition to these assessments specific strategies are adopted at the departmental level such as small group interactions, group discussions, power point presentations, lectures by specialised resource persons to share their expertise and skills with the students. All these initiatives help to assess the individual progress of students through the duration of the course. Continual evaluation helps the students to work on their weak points and improve their performance. The marks obtained in the internal assessment are put on the college website as well as on the college notice board. If there exists any discrepancy in the internal assessment, it is taken up by the concerned teacher.

Hansraj College is affiliated to University of Delhi and follows its designed curriculum strictly. The learning outcomes of each course are inbuilt in the prescribed syllabi and play a crucial role in determining and planning the teaching, learning and assessment strategies. The college updates its website regularly with notifications and important circulars/revisions sent by the University. The college website also displays important information for the students. The faculty members are actively engaged in continuous internal assessment of the students. If a student shows unsatisfactory performance, then remedial classes are held and simplified study material is provided by the teacher. Students are taken for industrial visits and they get hands-on experience in well equipped laboratories. The institution has several wings to look after the holistic development of the students; and to enhance the social and economic relevance of the courses offered. Through a sincere effort of the team, students are enabled to find meaning and purpose in life through connections with the community, and with humanitarian values. One of the important wings of the institution is, NSS, which has various sub-units dedicated to education (PADHAKU), health and rural development. The placement cell ensures that students are employable after graduation. It also brings about a leadership quality in the students.

The faculty members try to inculcate a sense of application and problem solving skills in their students, so that they can face and resolve any challenge. Students are motivated towards learning communication skills, motivational skills and team work. The strong bonding and camaraderie between the students and teachers is instrumental in the holistic development of students as good human beings and teachers as accomplished faculties.

### **Criterion III:**

Hansraj College understands the pivotal role of research to improve educational standards and the quality of teaching. The college promotes research-related activities and has established a research culture among faculty and students alike. The college has constituted a Research Committee that is headed by the Chairman of the Governing Body of the college, and the Principal is the convener of this committee. The committee has recommended the college to approach UGC, DST and other funding agencies for recognition of newly created research centers for financial support and creation of a central instrumentation facility. In addition, the





committee also recommended the implementation of ethics related to usage of living organisms in research as per the guidelines. A Dissection Monitoring Committee (DMC) and an Institutional Bio-safety Committee have already been constituted as per the UGC and DBT guidelines respectively. Two other committees namely the Library Committee and Academic Affairs Committee also look after the research-needs in the college. Hansraj houses one of the largest libraries in the North Campus, where a separate section is devoted to each subject. The library is connected to the central library of University of Delhi for all the e-journals. In addition, all the science departments house rich departmental libraries to cater to subject-specific needs.

Students and the faculty are encouraged to actively participate in various academic and research activities conducted in the college and beyond. Most of our faculty members have already completed their doctorate and others are encouraged to pursue their doctoral and post-doctoral research. The college provides facility of study leave for higher studies as per the university guidelines. Many faculty members have availed this facility for higher education and/or Ph.D in and outside India. Faculty members from various departments have supervised the Ph.D thesis of candidates (20, including the ongoing ones). Over the years, there has been a significant increase in the library and laboratory-related resources by allocating funds in that direction. Efforts are undertaken to sharpen the scientific aptitude and the research acumen of the students by encouraging them to attend seminars/lectures/research methodology workshops conducted regularly in the college as well as outside. Field trips and visits to leading research organizations in and around the university are organized by various departments to develop research culture among students.

Resources for research in Hansraj College get funded by various agencies like UGC, DST, DBT, NMPB etc. The college has also received a grant of about 38 lakhs (INR) from DBT under the Star College Scheme since 2013. The Research Council, University of Delhi, supports undergraduate students by providing stipend through Innovation Project Scheme. The college has successfully completed 11 such projects (involving 33 teachers and nearly 110 students) with a sanctioned fund of 59.5 lakhs (INR). A grant of 62 lakhs (INR) has been sanctioned for 13 new projects (with around 40 teachers and 130 students) in the current academic session (2015-16), involving almost all departments of the college. The faculty has fared exceptionally well in the innovation projects. We received “Best Innovative Idea” award for three of our Innovation projects and “Best Display Award” for two of the projects. The findings and designs in two of our innovation projects have been approved for commercial development and productivity by the industry for the benefit of the society. A documentary movie has also come up under one of the innovation projects. In total, the college faculty has published more than 109 papers in national/international conferences, wrote 101 books/ monographs, 99 chapters and 383 papers in national/ international journals during the last four years. Nearly 24 members have been honored with prestigious awards by University of Delhi and other organizations in the field of academics, research and journalism.

The college collaborates with various institutes for research activities and also through its faculty members for continual sharing and enrichment of the knowledge. The college invites researchers and scholars of national and international repute to deliberate on modern aspects of innovation and research as well as engage in discussions about social issues and interact with students. Students have also been actively involved in minor research projects and/or summer internship programmes, which are primarily interdisciplinary in nature.



Several college departments work in collaboration with other Universities/ Organizations/ Institutes for undertaking research. The college facilitates research for the faculty members at individual level too. Organizations like DST-SERB, NMPB, UGC-MHRD etc. have supported research activities in the college by sanctioning more than 96 lakhs (INR) during last four years. The faculty members have also availed travel grants of about 14 lakhs (INR) from University of Delhi, Swiss National Foundation, CSIR, and the afore mentioned, for the purpose of attending conferences and doing research work. The college has e-resources subscription, computers, Wi-Fi facility for all, special aids for differently-abled and many laboratories in each science department. Grants have also been received to purchase books/journals/periodicals from time to time.

The college has been very conscientious in promoting a healthy culture of interaction between students and their fields of interest for the sake of their future. It already has in place mechanisms to facilitate industry-institute interface. Therefore we have an absolutely star-studded body of alumni, many of whom have yielded unparalleled performance in the industry. The Research Committee and the IQAC interact with the industry on a regular basis and invite eminent researchers from the industry for workshops, seminars and conferences. The Placement Committee has developed strong roots in the various layers of the industry which in turn has let the interface to be experienced by every unit of the college.

The college is a socially responsible institution and we encourage our faculty members to extend their assistance to the community beyond the college as well. Faculty members from different departments of the college have been providing consultancy to various institutions like NGOs, Ministries, other national and international educational institutions, Selection Committees, Administrative Staff Colleges and Research Committees as well as Industry at individual level for several years.

The college extends the sense of responsibility beyond the walls of the campus through various extension activities and Institutional Social Responsibility (ISR) like NSS, NCC, ENACTUS, HARITIMA and WDC. These activities are conducted through societies/committees/cell for the holistic development of the students in to responsible citizens and more importantly in terms of developing environment, helping under-privileged sections and promoting women empowerment. The college promotes student involvement in various activities through programmes, seminars and workshops to ensure not only producing the scholars but as better human beings.

### **Criterion IV:**

Hansraj College hosts excellent infrastructural resources which are aesthetically pleasing and designed to ensure maximum academic utility. The college infrastructure ensures maintenance of high academic standards and also facilitates a wide array of extra-curricular activities. Hansraj College is well equipped to provide a healthy and conducive learning environment that promotes all round development for its students and faculty members.

With a vision to promote effective learning in an ICT enabled environment, most of the classrooms in Hansraj are equipped with LCD projectors. There are also mobile projectors available for use in rooms where fixed projectors are not available. Our laboratories have abundant resources which promote curiosity and trigger research interests in undergraduate



students. The computer labs are updated frequently to accommodate the latest innovations in the field of information technology.

Hansraj College has an ICT enabled Seminar Room for various seminars and conferences, a Yoga Room for recreation and occasional events and a state of the art auditorium with excellent sound and light systems. Aiming to co-develop both curricular and extra-curricular talents in its students, the college has recently inaugurated an acoustically efficient amphitheatre. This will provide students a world class space for a professional honing of their talents in the field of performing arts. The college has a huge sports ground with basketball and volleyball courts. It also has an archery training area, badminton hall, shooting range and various other facilities to make sure students are given maximum support to grow in co-curricular and sports activities.

The college has a boys' hostel which can accommodate around 200 residents. Hostel itself has got recreational facilities like badminton court and computer facilities. Necessary first aid is present for medical emergencies. Hostel administration ensures hygienic food and safe drinking water to the residents.

Hansraj College has excellent library resources with a formidable collection of books for all the departments. The library has a reading room where students are allowed to carry out their individual learning in silence. It has a periodical section which subscribes leading newspapers and magazines along with an internet access lab. Some departments in Hansraj also have their own department libraries hosting books to meet the specific needs of their courses. The library provides laptops, Ipods and Braille books to students with special needs. It is a matter of pride and joy for the college that we have successfully installed two elevators for use by differently able students.

The college ensures requisite budgetary allocation for the maintenance and upkeep of its infrastructure. It ensures cleanliness and hygiene through regular cleanliness drives. The green cover is also well taken care of by trained gardeners. The laboratories are regularly updated with latest resources. The college deploys generators for ensuring power backup and UPS for handling power fluctuations. Proper hygiene is ensured by providing clean drinking water clean, canteen premises and washrooms. Students are encouraged to keep the premises neat and clean which automatically adds to a healthy environment for teaching and learning.

## **Criterion V:**

Hansraj College offers continuous support to its students throughout the span of their studies with us. We, at Hansraj, welcome students of diverse backgrounds in terms of economic and social background, talent in fine arts, dramatics and debating, proficiency in sports, and also students who are differently abled and are in need of special support. The support offered is multidimensional and the administration, Governing Body, teaching and non-teaching staff extend all possible help. Apart from the national and state level scholarships which are awarded to the meritorious and/or needy students, Governing Body, college teachers and the alumni contribute towards freeships and fee concessions. Over the last four years about two hundred students have benefitted from the college funded scholarships. The Enabling unit has been the lifeline for the differently abled students, which provides the students with facilities like computers with internet, reading room, Braille books, etc., along with a team of



enthusiastic volunteers that helps these students with regular studies. All the efforts are made to ensure that students with special needs are able to help themselves and be self reliant.

Our college prides itself in excellence in co-curricular activities that cover drama, debating, music, dance, choreography, street plays, and a range of sport activities like basket ball, archery, chess, polo, golf, to name a few. Year after year, we have won trophies and best team awards, and recognition in the national and international arena. The college facilitates entry of students at admission time in the extra curricular activities and the sport category. These students are encouraged to further shine in their respective fields by participating in all levels of competitions. Help from teachers in terms of extra class time, extra time for submission of assignments and consideration in terms of attendance is extended.

Our academic results are a reflection of the relentless efforts by teachers and students alike. Each course has seen hundred percent results consistently. Each department is also actively involved in departmental activities like seminars, workshops, lectures by experts, trips to industry and/or fields of interest. Support in terms of funding, accompanying teachers, transportation is given whenever possible. Comprehensive and continuous help in academics, co-curricular, sports and involvement in service sectors like NSS and NCC ensure the all round development of the students.

Further, career counselling, placement cell and guidance for higher education, are an integrated part of the college's efforts for student progression. Many students benefit from the on-campus interviews and are placed in renowned business houses with competitive salaries. About 70% of our students choose to study further and develop their expertise before settling in their professions.

We continuously evolve and improve our efforts through continuous feedback that we get from staff and students. The Alumni is a source of constant encouragement and support, and we, with frequent interaction with the past students of this institution, retired teachers and present staff and students, are striving to empower our students with strength and humility.

## **Criterion VI:**

The mission of the College states “*Tamaso ma jyotirgamaya....Lead us from darkness to light*”: such is the inspiration which drives decisions and implementations at the college. Hansraj College aims at developing versatile human beings who can shoulder the responsibilities of the society and the nation, working towards the fulfilment of collective dreams. With a wide variety of departments ranging from Science, Commerce to Humanities, we equip our students with all the qualities required for the above. Economic independence, social maturity, emotional capability and strong character are some of the elements on which we focus specifically. The college is governed by the principles of democracy, transparency, flexibility, innovation and has a result oriented approach. The staff souncil committees and IQAC keeps a check on the quality of the teaching-learning process; and as the Management, through its efficient guidance, supervises the overall administration. A formal feedback mechanism pertaining to various aspects ranging from academic to administrative methods/procedures are in place. The management ensures that the feedback is analysed and corrective measures are taken for the improvement of various aspects of the functioning of the college. The teacher-in-charges of various departments provide annual academic calendar



about the functioning of various units of their respective departments. As the management believes in a democratic pattern of administration, students, staff as well as parents are allowed to have a direct interaction with the Principal or the management as and when required. The Governing Body gives full freedom to the Principal and staff for the effective functioning of the college. The college ensures a culture of participative administration through departments, staff council, student union and teachers' association. The staff council committees along with IQAC play an important role in ensuring the degree of the execution of both administrative and academic element of the college. It has been working at various facets of the college and has proposed a number of conventions in various aspects of functioning. There is a recognized network of committees to take care of upgradation of standards on various fronts. There is a procedure through which the Principal and the Management give us suggestions for betterment of the performance of teachers, thus providing encouragement for growth. A number of facilities are also available for personal as well as professional development of faculty members and students. The Management encourages the staff for the promotion of academic quality. Students are also encouraged to develop their leadership skills by organising extension activities such as *Padhaku*.

### Criterion VII:

Innovation in teaching is the greatest strength of Hansraj College. With adoption of modern and innovative teaching methodology along with traditional teaching, college is giving phenomenal performance in academics. College is consistently producing University Gold Medalists in Arts, Commerce and Science streams. Heterogeneity of subjects being taught in the college is also a reason of strength as it encourages interdisciplinary thought process that is helping in getting funding for new schemes from the university. Major strength of college in maintaining the serene environment is because every stakeholder is involved. Students, teaching and non-teaching staff members work hand in glove to meet the environmental quality standards.

We are a very large establishment catering to more than 5000 students. At times this strength is also a challenge. We are forever alert to the differential needs of the vast student body to which we cater. We always strive hard to improve upon the high standards our institution has set for itself.

However, there are various opportunities in future where we can make a mark. With students from all across the country and their involvement in many active societies working towards social development at large, we are headed to be leaders of tomorrow in social, academic and environmental sectors.





## **SWOC Analysis**

Hansraj College is one of the largest constituent colleges of the University of Delhi. Over the last decade, the college has been ranked several times among the top 10 institutions in the country, imparting quality education in all the three streams- arts, science and commerce. But more significantly, we have been committed towards providing our students, who hail from all walks of life, with a stimulating environment to grow into critical and responsible citizens of the country. The college was founded by the DAV College Managing Committee on 26<sup>th</sup> July 1948 in the memory of Mahatma Hansraj, a pioneer in the field of education. The Indian society was at its cultural, social, and political nadir when Maharishi Dayanand Saraswati was born in 1824. He grew up in an environment of political subjugation where he witnessed extreme casteism, superstition, religious dogma and social oppression of women and other marginalized sections of society. Taking a stock of the ground realities, and the nature of the task undertaken by Maharishi, his followers decided to commemorate his life and works not by building lifeless statues but by opening shrines of learning: schools and colleges where all the values advocated by Maharishi would be inculcated in children so that they could carry forward his message. In 1885 the first DAV school was established in Lahore which was subsequently upgraded to become the first DAV College. Today Hansraj College is a part of the 700 institutions run by the DAV. With more than 5000 students on its rolls, the college has completed 67 years of imparting higher education.

The DAV Vision of education coalesces with the National Policy on Education (1986) which lays great emphasis on developing a national system of education, with Education for All, keeping in mind the elimination of disparities through qualitative intervention, empowerment of women, access to education to disadvantaged sections of society, educationally backward minorities and the disabled.

### **Strengths**

Hansraj College is dedicated to the welfare of the entire education community which it hosts within its walls. For this reason, every member of this community, the teachers, the students, the administration and the staff, are committed towards producing an interactive and harmonious atmosphere whereby the cause of multidirectional education is promoted, enriched and nurtured. This ethos of mutual assistance and learning is sought to be evoked and maintained from the very first day a student takes admission into the precincts of the campus.

Our prospectus is made available online well before the admission begins so that students and parents can make informed decisions about their future. We have a meticulous admission procedure conducted by dedicated members of our faculty. We hold an orientation on the very first day of the session where students are addressed by the Principal and other senior members of the faculty. The students are introduced to the very soul of the Vedic culture that is at the heart of the DAV mission through the ritual performance of some hymns surrounding the holy fire.

Co-curricular activities are the very essence of holistic education whereby students learn not only from their only teachers but from their peers. We have an ECA admission committee specifically constituted to ensure the admission of extraordinarily talented students who can contribute to the cultural life of the college. Special effort is made to promote Indian classical



arts and we have had the privilege of hosting students who have gone on to win laurels for the college and gain considerable fame in their individual fields of expertise.

The teachers are not just involved in furthering the immediate interests of the students with respect to examinations, but also show a remarkable long-term vision by investing time, energy and effort into various interdisciplinary and inter-institutional research projects along with engaging in rigorous self-improvement through faculty training programmes, as well as various refresher and orientation courses. A lot of these research projects find fruitful culmination in contributing to the larger education community in the form of publications.

We at Hansraj College believe that the goal of higher education is to expand the understanding of the self and its socio-cultural milieu. There is a healthy relationship between teachers and students: maintaining the perfect balance between the respect for expertise and the easy approachability of a cordial environment. Regular tutorials and lively classroom discussions make the teaching and learning experience a joyous one. Examination results across all the three streams have been consistently good. The dropout rate is nearly negligible. An expansive approach in teaching is followed whereby students are encouraged to do research, take part in surveys, write reports and make seminar presentations. Students along with teachers as mentors undertake internships and field visits. Apart from classroom teaching a significant number of teachers contribute to innovations in pedagogy through group activities, film screenings, and interactions with scholars, performers and activists.

Vishwa Bandhu Centre for Vedic Research organizes yoga camps and promotes spiritual growth of the students and faculty. It inculcates the discipline towards health and wellness. Visiting guests have enriched the education experience of our students and faculty alike. Students are provided academic, financial, professional and psychological assistance in the best manner possible. We have an Internal Complaints Committee and gender sensitization programmes. Lots of scholarships and freeships are available for economically weaker students of promising potential. The Alumni community funds a lot of prizes annually to encourage students in their academic and extra-academic pursuits.

There are a considerable number of student societies in the college providing our students with the much-coveted platforms to nurture and showcase their talents. Our students have won laurels within the University of Delhi circuit and nationally in various activities such as debates, quizzing, and the performing arts. Hansraj College students are also constantly urged to hone their sports skills and many of our students are national and international level players in various fields such as archery, shooting, swimming, basketball and so on.

Our library is stocked with an impressive collection of books, journals, periodicals, e-resources. The library also possesses a number of computer terminals, and student access to them through WiFi facility. The college has recently installed two new lifts for the use of disabled students, and has built a new floor. The student hostel provides a homely atmosphere for the male students on campus.

### **Weaknesses**

The physical infrastructure is still lagging behind the pace which the college wishes to acquire. Afternoon classes in summer get very trying for teachers and students alike, in the lack of proper air-conditioning.





Although we have been trying to promote a disabled-friendly building, some of the blocks are still not made accessible through lifts or ramps, which makes it difficult for the specially challenged to access it.

The library does not provide remote access to the catalogue even though it is otherwise connected to the DU Online Library system. So the Wi-Fi access is not being used to its full academic potential. One of the primary obstacles for browsing is this lack of remote access. The library, in addition, should have a photocopy machine so that valuable texts are not taken outside the library precincts.

Although some departments have department libraries and department rooms, many departments yet have to get rooms allocated to do the same.

We need to have more social science departments such the introduction of honours courses in subjects like Philosophy, Sociology, Psychology, Geography and Political Science.

### **Opportunities**

Our college is a part of multiple innovation projects where students and teachers work together across interdisciplinary boundaries, many of which are also in collaboration with other famous Research Organizations.

The recently approved Research Projects such as the Language Laboratories for English, Hindi and Sanskrit will motivate students to look into the poetics and politics of translations and intertextual echoes in their linguistic and literary pursuits.

The NSS and *Enactus* Societies allows our students to extend their services beyond the college campus. This provides the young minds with an impetus to grow for the sake of the welfare of the society. Similarly, societies such as *Haritima* encourage the students to maintain a clean and green environment.

We are also always in the process of organizing and hosting seminars, workshops, conferences and extra-curricular events in college such that students get to interact not only with their peers but with leading experts in their fields of interest.

The Placement Cell and many members of faculty organize placement talks and internship opportunities for the students of the college: something that gives them a feel of the real world.

### **Challenges**

One of the abiding challenges for a growing college like ours is the immense heterogeneity of the students whom we cater to. Being one of the most prominent colleges of University of Delhi, we are thronged by students from not just Delhi or even NCR, but from all over the country. Apart from those hailing from north and north-west India, we have students from the North-East, from Bengal, from the southern states of the nation, and even foreign students. The classroom space then becomes one which is permeated with a huge diversity that is not only exciting but also rather unpredictable, sometimes even unequal. Different linguistic backgrounds also hamper free and fluent communication. So it is the responsibility of the college to develop strategies whereby the students will be made to feel at home and at par with each other even as we strive to maintain the plurality of the classroom.



Not all classrooms are ICT enabled and the college is attempting to develop a homogeneous and user-friendly infrastructure across the college. We need to upgrade all the boards in the classrooms to white boards for writing.

We need to consider the welfare of our female students more closely and hence the establishment of a women's wing in the hostel is of primary importance.

The SWOC analysis is a self-revelatory experience. The pride we have felt in listing out our strengths and opportunities has been matched by the humbling effect of the weaknesses and challenges. We have miles to go yet, but at least we have been able to diagnose the key areas to begin with. That has to be a good Start.



## PROFILE OF THE INSTITUTION:

### *1. Name and Address of the College:*

<b>Name:</b> Hansraj College		
<b>Address:</b> Mahatma Hansraj Marg, Malkaganj		
<b>City:</b> New Delhi	<b>Pin:</b> 110007	<b>State:</b> Delhi
<b>Website:</b> <a href="http://www.hansrajcollege.co.in">http://www.hansrajcollege.co.in</a>		

### *2. For Communication:*

Designation	Name	Telephone With STD code	Mobile & Fax	Email
Principal	Dr. Rama	011-27667458	9891172389 011-27666338	principal_hrc@yahoo.com
Vice Principal	----	- - -	---	---
Steering Committee Coordinator	Dr. Preeti Dharmarha, Associate Professor, Department of Mathematics	011-27667458	9810164942 011-27666338	Dr.preetidharmarha@hrc.du.ac.in

### *3. Status of the Institution:*

i) Affiliated College	
ii) Constituent College	√
iii) Any other (specify)	

### *4. Type of Institution:*

a. By Gender

i) For Men	
ii) For Women	
iii) For Co-Education	√

b. By Shift

i) Regular	√
ii) Day	
iii) Evening	



5. Is it a recognized minority institution? If yes specify the minority status (Religious/linguistic/any other) and provide documentary evidence.

Yes	
No	√

6. Source of Funding:

Government	
Grant-in-aid	√
Self-financing	
Any other	

7. a. Date of establishment of the college:

26/07/48

- b. University to which the college is affiliated/or which governs the college (If it is a constituent college):

University of Delhi

- c. Details of UGC recognition:

Under Section	Date, Month & Year(dd-mm-yyyy)	Remarks(If any)
i.2(f)	1/01/1971	12B_UGC.PDF
ii.12(B)	1/01/1971	12B_UGC.PDF

(Enclose the Certificate of recognition u/s 2(f) and 12(B) of the UGC Act) – Annexure II

- d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ Clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	Engineering and Technology(B.Tech.Electronics) (Annexure III)	27/04/15	For the batch admitted in 2013-14	One time approval
ii.	Engineering and Technology (B.Tech.Comp.Sci.)	27/04/15	For the batch admitted in 2013-14	One time approval
iii.	Nil			
iv.	Nil			



(Enclose the recognition/approval letter)

**8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?**

Yes  
No

√

If yes, has the College applied for availing the autonomous status?

Yes

No: N/A

**9. Is the college recognized**

**a) By UGC as a College with Potential for Excellence (CPE)?**

Yes

No √

If yes, date of recognition:.....NA.....(dd/mm/yyyy)

**b) For its performance by any other governmental agency?**

Yes

No √

If yes, Name of the agency.....NA.....and

Date of recognition:.....NA.....(dd/mm/yyyy)

**10. Location of the campus and area in sq.mts:**

Location	Urban
Campus area in sq.mts.	60,864.77
Built up area in sq.mts.	10,729.97*

(\*This includes the ground floor, residential area including hostel)

**11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.**

- Auditorium/seminar complex with infrastructural facilities : √ , Both facilities are available
- Sports facilities
  - Playground: √ (Dimensions: 140mts by 100mts. with Centre Cricket pitch and Football)
    1. Archery Training Area with Equipments.
    2. Indoor Wooden Badminton Hall (Dimensions: 18.40mts x 12.15mts x 8.20mts)



3. One concrete Basketball Court with uprights / Fiber Boards
4. Play Field ( Dimensions: 140mts x 100mts) with Centre Cricket Pitch and Football uprights
5. Indoor 10mts Shooting Range with 06 lanes
6. Volleyball Court with Uprights , one, standard size
7. Sports Room (Dimensions: 6.50mts x 4.30mts)
8. Sports Store Room (Dimensions: 6.50mts x 6.50mts)
- Swimming Pool :×
- Gymnasium : ×
- Hostel
  - Boys 'hostel √
    - Number of hostels: 1
    - Number of inmates: 200
    - Facilities: 28 rooms, T.T. table, Badminton Court, common room with TV, Newspapers and magazines, 24 hrs Wi-Fi, Medical facilities, 17 CCTV cameras for securities
  - Girls' hostel ×
    - Number of hostels :
    - Number of inmates :
  - Facilities (mention available facilities)
  - Workingwomen's hostel ×
    - Number of inmates
    - Facilities (mention available facilities)
- Residential facilities for teaching and non-teaching staff : 24 flats for teachers and 27 flats for nonteaching staff
- Cafeteria √
- Health Centre √  
First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....Health centre staff– There is provision for first aid, bed and emergency care in the Medical room of the college. If required the ambulance is made available by the college but college does not have own this facility.

<b>Qualified Doctor</b>	-	Part-time
<b>Qualified Nurse</b>	Fulltime	-

- Facilities like banking, post office, book shops:
  - Bank-- Canara Bank
  - Photocopy shop
- Transport facilities to cater to the needs of students and staff : N/A
- Animal house: √
- Biological waste disposal : Compost pit in the Botanical Garden
- Generator or other facility for management/regulation of electricity and voltage : √
  - 3 Generators of Ummins-Jackson of 125 K V
  - 1 Generator of Ummins-Sudhir of 40 K V.
- Solid waste management facility:
  - Waste paper is sent to recycling plant
  - Other waste is picked up by Municipal Corporation of Delhi on regular basis.
- Waste water management: The excess water from the tanks is directed to the lawns.
- Water harvesting ×



**12. Details of programmes offered by the college (Give data for current academic year)**

S. No	Programme	Duration (years)	Entry Qualification	Medium of Instruction	Sanctioned/ Approved Student strength	No. of students admitted
1	B.A. PROGRAMME	3	+2 Arts	English and Hindi	46	72
2	B.A. (H) ENGLISH	3	+2 Arts	English	54	62
3	B.A. (H) HINDI	3	+2 Arts	Hindi	54	66
4	B.A. (H) SANSKRIT	3	+2 Arts	Hindi	39	59
5	B.A.(H) ECONOMICS	3	+2 Arts	English	108	147
6	B.A. (H) HISTORY	3	+2 Arts	English and Hindi	54	76
7	B.COM.(HONS.)	3	+2 Commerce	English	208	254
8	B.SC. (H) MATHEMATICS	3	+2 Science	English	62	59
9	B.SC. (H) COMPUTER SCIENCE	3	+2 Science	English	46	63
10	B.SC. (H) ANTHROPOLOGY	3	+2 Science	English	31	36
11	B.SC. (H) BOTANY	3	+2 Science	English	62	71
12	B.SC. (H) CHEMISTRY	3	+2 Science	English	69	82
13	B.SC. (H) GEOLOGY	3	+2 Science	English	30	36
14	B.SC. (H) PHYSICS	3	+2 Science	English	69	86
15	B.SC. (H) ZOOLOGY	3	+2 Science	English	62	60
16	B.SC. PHYSICAL SC.	3	+2 Science	English	62	76
17	B.SC. LIFE SC.	3	+2 Science	English	62	75
18	B.SC. (H) ELECTRONICS	3	+2 Science	English	31	33
19	M.A. ENGLISH	2	B.A	English	31	33
20	M.A. HINDI	2	B.A	Hindi	23	20
21	M.A. SANSKRIT	2	B.A	Hindi	23	20
22	M.A. HISTORY	2	B.A	English and Hindi	23	29
23	M.COM	2	B.Com	English	35	38
24	M.SC. MATHEMATICS	2	B.Sc.	English	46	52
25	M.SC. OPER. RESEARCH	2	B.Sc.	English	31	31
26	M.SC. ANTHROPOLOGY	2	B.Sc.	English	31	30
27	M.SC. BOTANY	2	B.Sc.	English	23	20
28	M.SC. CHEMISTRY	2	B.Sc.	English	46	33
29	M.SC. GEOLOGY	2	B.Sc.	English	35	35
30	M.SC. PHYSICS	2	B.Sc.	English	46	60
31	M.SC. ZOOLOGY	2	B.Sc.	English	23	19

\* based on 1st year admission -2014-15





**13. Does the college offer self-financed Programmes?**

Yes ✓

No

If yes, how many? : 4

**14. New programmes introduced in the college during the last five years if any?**

Yes		No	✓	Number	
-----	--	----	---	--------	--

**15. List the departments (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes Like English, regional languages etc.)**

Particulars	UG	PG
<b>Science</b>	Mathematics, Botany, Chemistry, Zoology, Physics and Electronics	Mathematics, Botany, Chemistry, Zoology, Physics
<b>Arts</b>	Economics, English, History, Hindi, Sanskrit, Philosophy	Hindi, English, History, Sanskrit
<b>Commerce</b>	Commerce	Commerce

**16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)**

<b>a. Annual system</b>	-
<b>b. Semester System</b>	18
<b>c. Trimester system</b>	-

**17. Number of Programmes with**

<b>a. Choice Based Credit System</b>	18
<b>b. Inter/Multidisciplinary Approach</b>	-
<b>c. Any other (specify and provide details)</b>	-

**18. Does the college offer UG and/or PG programmes in Teacher Education?**

Yes

No ✓

If yes,

a. Year of Introduction of the programme(s).....(dd/mm/yyyy) and number of batches that completed the programme.

b. NCTE recognition details (if applicable)

Notification No.:.....Date:

.....(dd/mm/yyyy) Validity:.....



c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately? Yes No ✓

**19. Does the college offer UG or PG programme in Physical Education?**

Yes No ✓

If yes,

- Year of Introduction of the programme(s).....(dd/mm/yyyy) and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No.:.....Date:

.....(dd/mm/yyyy) Validity:.....

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately? Yes No ✓

**20. Number of teaching and non-teaching positions in the Institution**

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the UGC/ University/ State Government	-	-	-	-	180	-	64	-	98	-
Recruited	-	-	19	29	34	53	43	03	64	05
Yet to recruit	-	-	-	-	45	-	18	-	29	-
Sanctioned by the Management/ Society or other authorized bodies	-	-	-	-	-	-	-	-	-	-
Recruited	-	-	-	-	-	-	-	-	-	-
Yet to recruit	-	-	-	-	-	-	-	-	-	-

**21. Qualifications of the teaching staff:**

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Ph.D	-	-	9	22	18	31	80
M.Phil	-	-	3	3	8	12	26
M.A	-	-	-	-	-	5	5
M.Sc.	-	-	-	-	4	-	4
M.C.A	-	-	1	-	1	-	2
M.Com	-	-	1	-	-	2	3
M.B.A	-	-	-	-	-	1	1

**22. Number of Visiting Faculty/Guest Faculty engaged with the College: 16**



**23. Furnish the number of the students admitted to the college during the last four academic years.**

Categories	2012-13		2013-14		2014-15		2015-16	
	M	F	M	F	M	F	M	F
General	403	318	491	114	434	304	437	438
SC	126	36	133	51	123	53	160	87
ST	49	20	58	17	51	21	88	33
OBC	233	81	222	88	234	110	309	155
PH	16	6	16	2	17	0	24	6
Others	49	23	46	23	64	17	61	24

**24. Details on students enrolment in the college during the current academic year:**

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same state the college is located	498	150	N A	N A	648
Students from other states	888	264	N A	N A	1152
NRI	-	-	N A	N A	-
Foreign Students	27	05	N A	N A	32
Total	1413	419	-	-	1832

**25. Dr.opout rate in UG and PG (average of the last two batches)**

UG— 3.21%

PG— N/A

**26. Unit Cost of Education**

(Unit cost=total annual recurring expenditure (actual) divided by total number of students enrolled)

- including the salary component : Rs.61870.00 (2012-13)
- excluding the salary component : Rs.18474.00 (2012-13)

**27. Does the college offer any programme/ in distance education mode (DEP)?**

Yes No ✓

If yes,

a) Is it a registered centre for offering distance education programmes of another University

Yes No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes No



**28. Provide Teacher-student ratio for each of the programme/course offered**

Name of the Department	Student-Teacher Ratio
Commerce	30:1
Computer Science	22:1
Hindi	16:1
Sanskrit	42:1
Economics	25:1
English	12:1
Philosophy (For B.A.(Program))	30:1
History	22:1
Mathematics	25:1
Botany	20:1
Zoology	20:1
Physics and Electronics	27:1
Chemistry	29:1
Chemistry B.Sc.(Prog.)	20:1

**29. Is the college applying for Accreditation: Cycle1 ✓ Cycle2 Cycle3 Cycle4**  
**Re-Assessment:**

(Cycle1 refers to first accreditation and Cycle2, Cycle3 and Cycle4 refers to re-accreditation)

**30. Date of accreditation\*(applicable for Cycle2, Cycle3, Cycle 4 and Re-assessment only)**  
 N/A

**31. Number of working days during the last academic year: 294**

**32. Number of teaching days during the last academic year: 166**  
 (Teaching days means days on which lectures were engaged excluding the examination days)

**33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC :**  
 5/08/15

**34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.**  
 N/A

**35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)**  
 Nil



## **CRITERION WISE ANALYTICAL REPORT**

### **CRITERION –I: CURRICULAR ASPECT**

#### **1.1 Curriculum Planning and Implementation**

##### **1.1.1 State the vision, Mission and objectives of the institution and describe how these are communicated to the students, teachers, staff and other stakeholders:**

Hansraj College was founded by the DAV College Managing Committee in 1948. Our college is in the vanguard of institutions created by the DAV movement which has been striving constantly to transform society.

##### **The Mission:**

The DAV vision of education resonates well with the National Policy on Education (1986) which lays great emphasis on developing a national system of education, with Education For All, keeping in mind the elimination of disparities in the educational system and provision of more facilities through qualitative interventions, empowerment of women, access to education to disadvantaged sections of the society, educationally backward minorities and the disabled. It also calls for greater rigour and discipline in academic pursuits, autonomy and accountability, experimentation and innovation and nurture excellence and modernization of processes at different levels of education. In order to accomplish the mission, the objectives laid down are as under:

- To provide a wide range of holistic education by homogenizing the western knowledge while remaining anchored to the Indian cultural moorings;
- To act as a catalyst of change by spreading education, and by dismantling the cobwebs of ignorance and illiteracy;
- To develop individuals who are morally upright, intellectually well-informed, socially concerned, emotionally balanced, physically well-developed and culturally accomplished;
- To stimulate a scientific temper by crusading against superstitions and out-dated customs like child marriage, caste system, female foeticide, dowry, gender bias, regionalism etc;
- To sensitize individuals towards social welfare and
- To nurture creative and resourceful minds who think big, think fast and think ahead, who care for the nation and the weaker sections of society, and are imbued with humanistic passions and values

##### **The Vision:**

The DAV has a clear-cut vision:

- To continue expanding and exploring, locally and globally and be a knowledge leader and content provider.
- To muster strategies to become a global epicenter of knowledge, culture, skills, technology, research and service.
- To empower women through education.

**Communication to the stakeholders**

The vision and mission of the college is provided in the college website for communication to students and teachers.

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

While being a constituent college of University of Delhi imposes parameters within which we function in terms of the curriculum design and coverage, allocation of time for teaching and tutorials etc. we at Hansraj try to optimize the same to further our goal of providing the highest quality education to our students. The academic session begins with an orientation programme where the newly inducted batch is sensitized not only to the academic philosophy of our college but also to the importance attached to their holistic development. We are firm believers in the philosophy that attributes such as discipline, hard work, intellectual curiosity interact with intellectual rigour in ways that are dynamically rewarding and hence indispensable tools in our pursuit of excellence. At a micro level, every department enhances the college level efforts by conducting departmental orientations which spell out the roadmap that each department plans to chart.

We believe that intra departmental allocation of papers can be used as an efficiency enhancement tool. While one cannot deny that some faculty members may be intrinsically more inclined towards teaching particular kinds of papers so that competence and experience are crucial, a competing hypothesis claims that developing new competencies may have its own advantages. We therefore encourage faculty members to switch papers whenever the need arises or even otherwise. Based on the preferences of the faculty members, the teacher in charge of every department creates their workload well before the commencement of the academic session. The workload is then provided to the Timetable committee for creating timetables for each course. The academic calendar is also prepared at the beginning of the session which contains information such as exam dates, internal assessment dates, etc. The members of the faculty engaged in the above exercises are fully cognizant of the importance of the timely completion of their deliverables so that there is no scope for uncertainty and adhocism.

The above mentioned need to adhere to the curricular requirements of our parent university does not restrict us from responding to every opportunity to go beyond the curriculum. This objective is achieved through the superstructure of societies existing in the college such as the Economics Society, the Commerce Society, the English Society etc. These societies have made remarkable contributions in expanding the horizons of students and in renewing and consolidating their interest and commitment towards their respective subjects. These societies organize talks and seminars relevant to their specific disciplines which serve to deepen the students understanding of their curriculum. They play a strongly and indispensably complementary role to class room teaching.

Knowledge is like an eternal spring that never ceases and hence as educators it becomes our duty to constantly update and expand ourselves academically. We at Hansraj understand that without such upgrade effective implementation of the curriculum is not possible. Therefore our faculty is constantly encouraged to participate in self improvement programmes such as orientation courses, refresher courses, faculty improvement programmes etc. Faculty



members are encouraged to pursue Ph.Ds are granted study leave for the same. Efforts are made to ensure that faculty members do not feel constrained by the non availability of teaching resources. Towards this objective regular updation of the library takes place so that teachers and students are able to draw from the constantly growing pool of knowledge.

**1.1.3 What type of support (procedural and practical) do the teachers receive (from the university and/or institution) for effectively translating the curriculum and improving teaching practices?**

- The University organizes departmental workshops for the faculty for effective curriculum delivery. The institution encourages faculties to take part in that workshop.
- The faculty are encouraged to take part in Faculty Improvement and Development Programmes. The faculty are provided training on effective usage of advanced ICT tools and techniques for effective teaching learning. ICT enabled classrooms are provided for every department.
- Reference books and journals are made available in the library for the usage by faculty.
- Internet facilities are provided for the faculty in college.
- For faculty involved in active research, study leave is provided.
- Teachers take part in various Orientation and Refresher courses, seminars and workshops organized by UGC-HRDC.
- Many of our teachers have got international exposure under the “Faculty Training Program”. The aim of the program is to understand and learn the curriculum design and development of other universities, with which the University of Delhi has signed MOUs such as University of Nottingham, King’s College London, University of Edinburgh, etc.
- Our faculty members are also active members of various committees such as Committee of courses formed/established by the University of Delhi and other universities that are involved in designing the undergraduate courses.
- The college constitutes an Academic Affairs Committee every year which provides a platform for addressing issues related to the effective delivery of the curriculum.
- At the college level, our teachers are convenors/members of various committees such as Student’s Welfare Committee, Academic Affairs Committee, Internal Complaints committee against Sexual Harassment, Women’s Development Committee and many more.
- College has an Enabling Unit with a Braille library, computers, and other facilities like reader, writer, scanning, print out etc. to help physically challenged students.

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

- A detailed academic calendar is prepared by teacher in-charge of every department at the beginning of the session.
- The faculty members create modular plan for every course.





- The teacher in-charge monitors the progress periodically and take corrective action such as arrangement of extra classes as necessary.
- The moderation committees at department level ensure that internal assessment requirements of the curriculum are adhered to.
- Every department is provided with ICT enabled classrooms.
- ICT training is provided to the faculty for effective curriculum delivery.

### 1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum.

- The institution constantly keeps in touch with the university through formal or informal interaction. Every semester, faculty formally meets their respective departments at the University for facilitating curriculum development and prescribing required syllabus revision.
- Eminent faculties are invited to the institution for Guest lectures, workshops, and seminars by various departments and societies; details of which can be found in the individual department reports.
- Faculty of the institution takes part in various Faculty Development and Improvement Programmes to keep them updated about the latest trends in the technology and industry.
- Feedback links are provided in the college website for obtaining feedback from the stakeholders.
- Placement cell of the college facilitates the interaction and connection with the corporates, banks, and other consulting organizations like Deloitte, UBS Verity Knowledge Center etc.

In addition to the above point, the college has also organized seminars for overall well-being and capabilities of the students like “Young Leadership Seminar” by KPMG, “Resume Building” by an IIM faculty alumnus and a seminar on “Pre-Marital Counseling” by Delhi Commission for Women organized by the Internal Complaints Committee for Sexual Harassment. The objective of such programmes is to ensure that students find meaningful employment and grow into better human beings.

- The college also facilitates smooth conduct of competitive examinations.
- Most of our teachers are involved in research activity through Innovation Projects funded by UGC and undertake other research projects on an individual level. Teachers also boost their students to undertake research as a part of internal assessment. The main purpose of this is to ensure that the students think beyond the prescribed curriculum. Some of our students are associated with research institutions like Centre for Civil Society and several others.
- Hansraj College is proud to be associated with projects like *Enactus*. *Enactus* Hansraj has three on-going projects- Project Boond, Project Mithaas and Project Lekhni. The students are guided by a faculty member who is the convenor. At the recently concluded *Enactus* India National Competition 2015 on 21-22 July, *Enactus* Hansraj College was the 2nd runners-up amongst 56 teams across India.



**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/departments represented on the Board of studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

Please find below the list of faculties members who are a part of curriculum development committee/committee of courses/board of research studies/board of studies of the affiliating and / or other universities

**Table 1.1: List of Staff Members Involved in Curriculum Development/Review in Last Four Years**

S. No.	Name	Department
1.	Dr. Meenakshi Malhotra	English
2.	Sanjiv Nandan Prasad	English
3.	Dr. Neetu Sharma	Hindi
4.	Dr. Preeti Dharmarha	Mathematics
5.	Mukund Madhav Mishra	Mathematics
6.	Dr. Sharma Bhanu Bhupendra	Philosophy
7.	Sandhya Rathore	Sanskrit
8.	Dr. Neelam Gandhi	Zoology
9.	Dr. Brijendra Singh	Chemistry
10.	Dr. Neera Chopra	Commerce
11.	Meghna Malhotra	Commerce
12.	Dr. Krishan Sachdeva	Commerce
13.	Hema Kapur	Economics
14.	Shailu Singh	Economics
15.	Anita Balani	Economics
16.	Vandana Chaudhary	Economics
17.	Animesh Naskar	Economics
18.	Kapila Mallah	Economics
19.	Ms. Simran Sethi	Economics
20.	S K Laroia	Economics
21.	Monmayee Basu	History
22.	Amit Kumar	History
23.	Sharmila Shrivastava	History
24.	Dr. Mamta Saini	Physics and Electronics
25.	Dr. Mona Bhatnagar	Physics and Electronics
26.	Dr. Namrata Soni	Physics and Electronics
27.	Dr. Amit Sehgal	Physics and Electronics
28.	Sh P K Singh	Physics and Electronics
29.	Dr. Harmeet Kaur	Computer Science
30.	Dr. Baljeet Kaur	Computer Science
31.	Dr. Manoj Agarwal	Computer Science
32.	Dr. V.S Sajwan	Botany
33.	Dr. Manju Mathur	Botany
34.	Dr. Vijay Rani Rajpal	Botany
35.	Dr. Anand Sonkar	Botany
36.	Dr. Monika Koul	Botany
37.	Dr. Nilofer Kaul	English



Feedback links are provided in the college website for student feedback, teacher feedback and stakeholder feedback on curriculum through which stakeholders can provide feedback. The data is analyzed and shared at the relevant forum.

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If ‘yes’, give the details on the process (‘Needs Assessment’, design, development and planning) and the courses for which the curriculum has been developed.**

The institution doesn’t develop any curriculum as it is not mandated by the university.

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation.**

There is a comprehensive formal and informal system at Hansraj College to ensure that the stated objectives of the curriculum are achieved in the course of implementation. The formal mechanism includes midterm internal assessment through presentations, viva, practical examinations (wherever the nature of the course demands) class and home assignments, class tests and group discussions. The internal assessment is done based on broad guidelines issued by the University as well as other guidelines that are decided upon by all department members in their regular meetings. The department heads in college have the onus of keeping track of completion of curriculum milestones throughout the semester. A moderation committee for each department also reviews internal assessment marks to make amends for any inconsistencies. The final examination paper setting and evaluation, as mandated by University guidelines, is taken up by every teacher and therefore ensures participation of all at the end of every semester. The teachers actively participate in main department meetings (attended by teachers from other colleges as well) to discuss and deliberate changes in curricula in line with changing requirements, industry demands and student feedback, along with their own holistic understanding of the subject.

Most teacher at their own level, informally keep track of course milestones and ensure that curriculum implementation is done in line with the course objectives. Besides, it is the endeavour of every teacher at Hansraj to not just strictly follow the curriculum but ensure all round development of their students through helping them appreciate related knowledge that may be outside the strict ambit of the course. The teachers actively organize seminars, presentations, educational trips and encourage students to take up independent studies and research to aid in their holistic learning.

Wherever the teacher deems necessary, in addition to regular lectures and tutorials, they fix extra doubt sessions and tutorials to buttress the holistic learning process. The department head also regularly tracks student feedback related to curriculum objectives and the learning process and makes sure that course milestones are effortlessly achieved.



## **1.2 Academic Flexibility**

### **1.2.1 Specify the goals and objectives and give details of the certificate/diploma/skill development courses etc., offered by the institution.**

#### **CERTIFICATE, ADVANCED AND DIPLOMA COURSES**

Since 1989-1990, the college conducts part-time certificate courses, diploma courses and advanced diploma courses in German and French languages. These courses are run as per the official guidelines of the University of Delhi. The teachers for these courses are deputed by the relevant departments of the University of Delhi and the examinations etc. are also run as per the schedule specified by the University of Delhi. At the end of each course, successful students receive their Certificate, Diploma or Advanced diploma certification documents from the college office, as and when supplied by the University of Delhi. The classes for these courses are usually held late in the afternoon. Minimum eligibility is 45% marks at the Senior School certificate examination level. Priority is given to students of University of Delhi. Some seats are reserved for representatives of business and trade organization engaged in exports. For details of the certificate, diploma and advanced courses please refer to 1.2.4.

#### **NON- COLLEGIATE WOMEN'S EDUCATION BOARD (NCWEB)**

Hansraj College is a teaching centre for NCWEB. This board enables thousands of young women who cannot join regular college due to various reasons to obtain undergraduate degree from the University of Delhi. NCWEB is unique system with classes on Saturdays and Sundays leaving students with 6 working days to follow their dreams. In this age of 100% cut-offs and limited seats in the University of Delhi, NCWEB is a welcome agreement for women especially working women to obtain a degree from the University of Delhi. The board provides library facilities at all teaching centres including Hansraj College. The board also provides financial aid and loan book facility to the needy and deserving students. There are 50 teaching days in a year and classes are held either on Saturdays/ Sundays or during academic breaks of University of Delhi. A major advantage of this program is utilization of existing infrastructure at a low cost. Most of the teachers of NCWEB are deputed as guest faculty. The NCWEB offers two three-year courses in the annual mode: B.A.(Program) and B.Com at the undergraduate level.

#### **SKILL DEVELOPMENT PROGRAMS:**

Hansraj conducts skill-oriented programs such as:

- Remedial classes in English for SC/ST/OBC students and in Hindi for Northeast students
- Classroom teaching incorporates the use of software programs like Tally to enhance accounting skills, and econometric packages like STATA, GRETL etc. to enhance quantitative skills of the students.
- KPMG conducts regular workshops to enhance the career related skills of students working for *Enactus* Hansraj.
- Guided tour to institutions like the National Stock Exchange to buttress the pedagogy of theoretical knowledge
- Teachers regularly motivate and train students to undertake independent research to bridge the gap between theory and practice.



- Workshops on creative writing are often held under guidance by the Department of English as part of the literary society festival.
- Hansraj has very active Co-Curricular societies for e.g. Swaranjali, Dramatics society, Debating society which contribute to honing their skills in the respective areas.
- Women Development Cell regularly organizes self-defense training for girls in collaboration with Delhi Police.

### 1.2.2 Does the institution offer programs that facilitate twinning/dual degree? If 'yes' give details

The University of Delhi does not allow dual degree.

### 1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skill development, academic mobility, progression to higher studies and improved potential for employability.

Hansraj College has effectively and efficiently implemented the assigned DU curricula with regular monitoring in ways that serve the needs of the students in the best possible way. This has been made possible by the following:

- The Choice based Credit System adopted by the University of Delhi this year is a more determined move toward academic flexibility.
- Due to the wide range of Core and Elective options offered by the college (Please refer to the profile of the institution for a list of all courses), there is immense choice available to the students which make the learning highly specialized and inter-disciplinary.
- Courses offered on modular form: All courses offered by the college in accordance with the DU system are in modular form.
- Credit transfer and accumulation facility: Not applicable
- Lateral and vertical mobility within and across programs and courses: Not applicable
- Enrichment courses: The various enrichment programs which enable skill development, employability and progression to higher studies are as follows:
  1. Placement cell regularly organizes workshops and seminars to enrich the students with necessary skills for finding suitable employment.
  2. Similarly, concepts such as entrepreneurship, business development etc. taught in the classroom to commerce students are implemented by students under the activities of societies such as *Enactus*. Since its inception in 2012, *Enactus* Hansraj has continuously striven to direct the power of social entrepreneurship to implement community empowerment projects with the objective of changing lives and spreading happiness. It has three ongoing projects – **Project Boond, Project Mithas and Project Lekhni**.
  3. All departments hold regular seminars/talks/workshops/conferences on areas that go beyond the prescribed curriculum. Students in many departments are encouraged to write research papers and present them at various forums.
  4. All departments have very active departmental societies run by the appointed student representatives under the guidance of teachers, which contribute



immensely in adding to the subject knowledge and developing leadership and teamwork skills.

5. All forms of creative expressions are encouraged through various societies such as Choreography society, Contemporary dance society, and many more.
- While the curriculum is clearly specified by the University guidelines, our institution provides facilities to be academically flexible. For instance the Economics and Commerce department take the initiative to use the ICT facilities provided by the college to give the students hands on experience of concepts taught through relevant software. Such knowledge aids students progression to higher studies.
- Faculty members regularly counsels students on various career options and help them in their application process by providing reference letters and whetting their statement of purpose if they are applying for postgraduate course in Universities abroad.

**1.2.4 Does the institution offer self-financed programmes? If ‘yes’ list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary, etc.**

*Table 1.2: List of Self- Financing Courses Offered by Hansraj College*

YEAR	SELF FINANCING COURSE			
2011-12	B.Sc. (H) Computer Science Part I, Part II & Part III	CERTIFICATE COURSE IN GERMAN & FRENCH	DIPLOMA COURSE IN GERMAN & FRENCH	ADVANCE DIPLOMA COURSE IN GERMAN & FRENCH
2012-13	B.Sc. (H) Computer Science Part I, Part II & Part III	CERTIFICATE COURSE IN GERMAN & FRENCH	DIPLOMA COURSE IN GERMAN & FRENCH	ADVANCEDIPLOMA COURSE IN GERMAN & FRENCH
2013-14	B.Sc. (H) Computer Science Part II & Part III	CERTIFICATE COURSE IN GERMAN & FRENCH	DIPLOMA COURSE IN GERMAN & FRENCH	ADVANCEDIPLOMA COURSE IN GERMAN & FRENCH

**1.2.5 Does the College provide additional skill oriented programmes, relevant to regional and global employment markets? If ‘yes’ provide details of such programme and the beneficiaries**

- The college provides certificate courses in various areas such as foreign language courses, English courses. The institution is working towards signing a formal agreement with NSDC for providing skill based training to the students.





- Special workshops are held to teach software programmes like Tally to enhance accounting skills, and econometric packages like Stata, Gretl etc to enhance quantitative skills of the students.
- KPMG conducts regular workshops to enhance the career related skills of students working for *Enactus* Hansraj.
- Guided tour to the National Stock Exchange to buttress the pedagogy of theoretical knowledge
- Teachers regularly motivate and train students to undertake independent research to bridge the gap between theory and practice. .
- Hansraj has very active Co-Curricular societies for e.g Swaranjali, Dramatics society, Debating society and many more; which bring accolades to the college.
- Women Development Cell regularly organizes self-defense training for girls in collaboration with Delhi Police.
- Educational imparting skills are promoted for school students of different classes through National Service Society under the Padaku scheme, which not only help them create job opportunity but also build a successful career

### **1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institute take advantage of such provision for the benefit of students?**

There is no provision for distance mode of education.

## **1.3 Curriculum Enrichment**

### **1.3.1 Describe the efforts made by the institution to supplement the University’s Curriculum to ensure that the academic programmes and Institution’s goals and objectives are integrated**

Hansraj has stood by and maintained the highest teaching and research standards and believes in imparting education to all in an unbiased manner, ensuring that the college promotes inclusive learning in a free and liberal environment. We lay equal emphasis on sports and extracurricular activities and work zealously towards all-round development of our students. We believe in equipping our students with values for life. Hansraj has evolved with the changing environment, catering to the needs of a diverse and multi-ethnic student community. There is a great sense of belonging to this institution among the teachers and students.

The college strongly believes in holistic leaning, going beyond the confines of strict curricula. We believe in integrating our diverse student and teaching community through several events as well as formal and informal interactions that enable inter university, inter college and inter departmental participation, creating a wonderful platform for exchange of ideas and sharing of knowledge. There is tremendous learning both inside and outside the classroom through such events.

Department festivals witness huge participation by the entire teaching and student fraternity. Besides, the college boasts of student and teacher societies spanning varied fields including Botany, English and Hindi Debating, English and Hindi Literary Societies, History Society,





the very popular Swaranjali (the music society), Terpsichorean (choreography society), Debating, Dramatics, Sanskritiki, Ordinateaur (computer science), Commerce, Mathematics, Navankur, Economics Society and General Awareness. Further, N.S.S. and *Enactus* instil in students a sense of social responsibility and help them understand and find practical solutions to problems confronting individuals, groups and communities. This helps our students to bring about positive change in the society as they enthusiastically work towards spreading the message of peace, education, love and development. In addition, SPIC MACAY, a Society for Promotion of Indian Classical Music and Culture Amongst the Youth, has worked closely with our college, continuously inspiring our students to conserve and to promote India's rich culture and heritage.

At Hansraj College, students and teachers get the opportunity to interact with and learn from eminent personalities from diverse fields through several seminars, conferences and other events that are organized in the college from time to time. Such events, along with the departmental festivals which are primarily organized by students, instil in them a sense of team work and hone their leadership and managerial ability, besides giving them multi-faceted exposure.

### **1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experience of the students and cater to needs of the dynamic employment market?**

An effective curriculum delivery is as much dependent on the design and implementation of the curriculum as on the extent to which students are equipped with certain key skills and attitudes essential to face the job market.

- Familiarity with computers and some hands on experience in using discipline specific software is encouraged.
- Field visits are arranged whenever possible to provide hands on experience.
- Focus on encouraging students to participate in extracurricular activities and sports helps our students to develop well rounded personalities besides being in good mental and physical health.
- These confident young men and women therefore are well positioned to benefit from the activities of the college placement cell. The placement cell facilitates an interface between companies desirous of picking up interns and students who wish to gather valuable work experience if not long term employment opportunities.
- For every course, ICT based content is arranged in addition to the normal course as and when necessary.
- Regular feedback is taken from all the stakeholders. Feedback link is provided in the college website. Feedback is analyzed and result is shared with the management for subsequent action.

### **1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum.**

Our institution firmly believes that education is incomplete unless it teaches students ways of life that are geared towards creating compatibility between the private and the social good. Thus significant efforts and resources are allocated to create awareness on issues relating to



gender sensitization, climate change, human rights etc. The Woman's Cell of the college and the Women Development committee regularly organize workshops and seminars to sensitize the students on issues of gender equality. Students have also visited slums and interacted with the women living there to get an understanding of the quantum of work that needs to be done in this field. The spirit of womanhood is celebrated in varied ways such as exhibitions and poster making events, especially on the International Women's day celebrated each year on the 8<sup>th</sup> of March. Self defence training camps are also organized periodically to emphasize the importance of independence. The environment society *Haritima* works towards creating awareness on environmental issues through seminars held in collaboration with NGO's working on such issues. Its annual fest called PrakritiKumb is a much awaited event in the college calendar and serves well to spread information among the students and public about the various environmental threats and its consequences. Throughout the year, cleanliness drives are conducted in which both teachers and students actively participate. A bio-degradable plant set up by *Haritima* within the college premises encourages re-use and recycling.

#### **1.3.4 What are the various values-add courses/enrichment programmes offered to ensure holistic development of student?**

- Class room teaching is extended to teach software programmes like Tally to enhance accounting skills, and econometric packages like Stata, Gretl to enhance quantitative skills of the students.
- KPMG conducts regular workshops to enhance the career related skills of students working for *Enactus* Hansraj.
- Guided tour to the National Stock Exchange to buttress the pedagogy of theoretical knowledge
- Teachers regularly motivate and train students to undertake independent research to bridge the gap between theory and practice.
- Hansraj has very active Co-Curricular societies for e.g Swaranjali, Dramatics society, Debating society and many more for honing their skills in these areas.
- Women Development Cell regularly organizes self-defense training for girls in collaboration with Delhi Police.
- Extra classes are conducted for students who are not able to cope with the pace of the class by all departments.
- Vibrant placement cell remain active throughout the year for overall development of the students by organizing various activities including career guidance and interview preparation.
- College sports office plays a crucial role in building various skills and provides opportunities for holistic development of students as per the latest definition of health according to WHO.
- College also has a separate room for Yoga and meditation within the college premises.

**1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum.**

A multilevel strategy for collecting feedback from various stakeholders is in place. Formal feedback is being collected through links on college website. Curriculum issues are also discussed during department and staff council meetings. Informally, class representatives convey issues related to curriculum to individual teachers. These feedbacks are conveyed to the University Departments during curriculum review meetings that are held every semester.

**1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?**

Formally, our college monitors and evaluates the quality of its enrichment programmes through the Internal Quality Assurance Cell (IQAC). This cell is entrusted with the responsibility of collecting feedback from stakeholders about the quality of curriculum delivery, the limitations, proposals for improvement etc. Informally, the prevalent work culture marked by its very low levels of tolerance towards work avoidance serves as a quality control mechanism. The Staff Council also serves as a body where issues related to the monitoring of enrichment programmes are discussed and resolved. At a micro level, teacher-in-charges and staff advisors to various societies are constantly engaged in monitoring and improving such programmes.

**1.4 Feedback System****1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

Even though our institution does not have a direct role to play in the design and development of the curriculum, our faculty members do contribute to the same indirectly. They are members of the Board of Studies and course revision committees at the university departments that have been instrumental in adapting the syllabi to the changing requirements of the structure of undergraduate studies (especially since the university has moved from the annual to the semester to the FYUP to the CBCS in a not so long time span)

Faculty members have contributed to the development of study material in the form of online course content facilitated by the Institute of Life Long Learning (ILLL), University of Delhi and UGC sponsored project for e-content development for PG courses under MHRD, Govt of India among other such initiatives.

**1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programme.**

The college has set up Internal Quality Assurance Cell (IQAC) which monitors and evaluates the quality of enrichment programmes. This cell is entrusted with the responsibility of collecting feedback from stakeholders about the quality of curriculum delivery, the limitations, proposals for improvement etc.

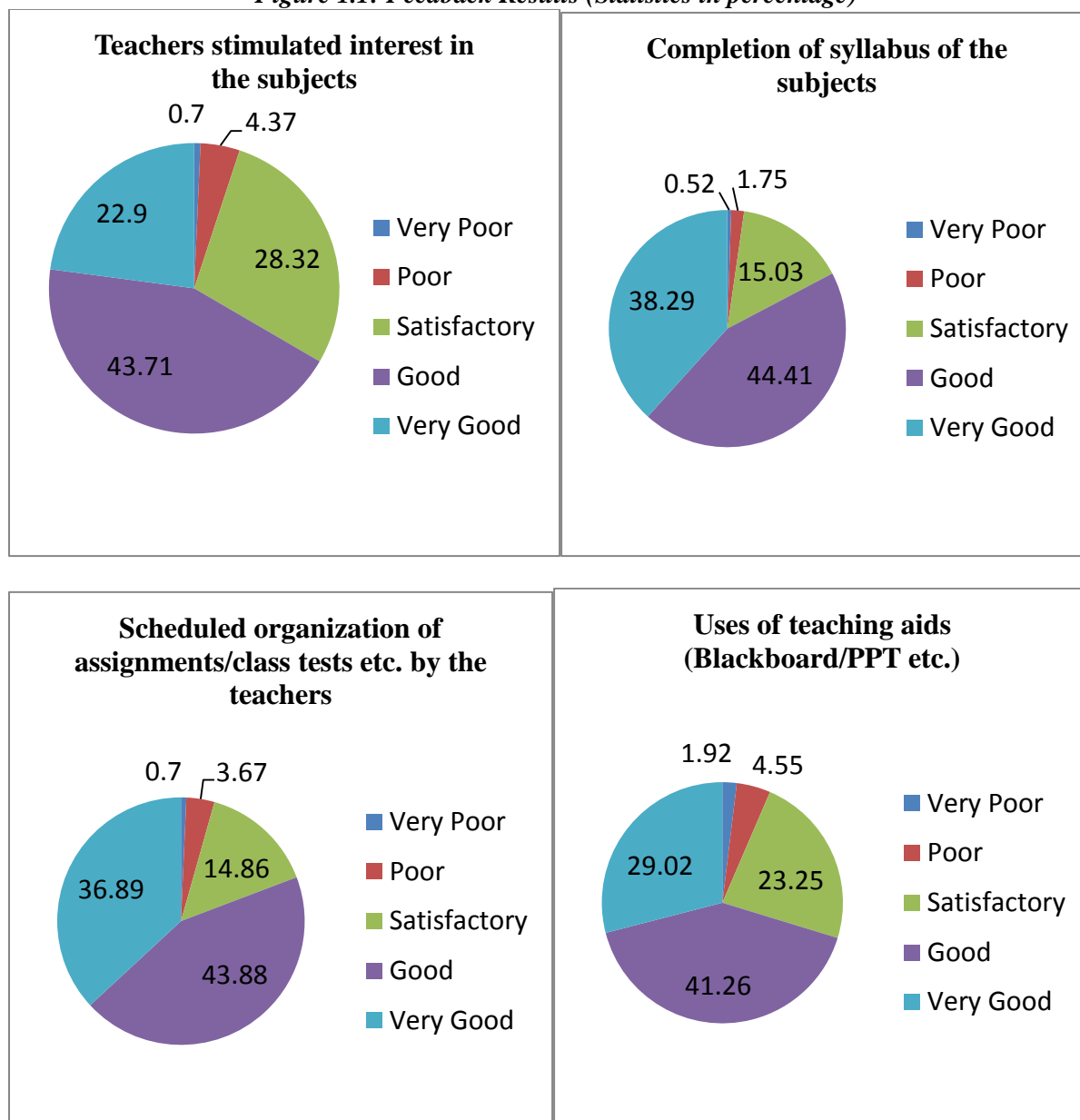
A link has been provided in the college website to obtain feedback on curriculum from all stakeholders. Feedback is analyzed and result is shared informally with the university.



Feedback was collected from 572 students on various benchmarks to gauge their experience in the classrooms. The charts in figure 1.1 illustrate some of this data.

In addition, we do not understate the importance of informal feedback collection through fora such as the Hansraj college Alumni Association, the various departmental alumni associations etc. Also some faculty members routinely collect feedback from their students and use the same to improve academic outcomes.

**Figure 1.1: Feedback Results (Statistics in percentage)**





**1.4.3 How many new programmes/Courses were introduced by the institution during the last 4 years? What was the rationale for introducing new courses/programmes?**

As a constituent college of University of Delhi, we follow its guidelines with respect to programmes/courses. We implemented the four year under graduate programme in 2013 till it was withdrawn in 2014. This year the University has introduced the Choice Based Credit System which we have adopted.

**Any other relevant information regarding curricular aspects which the college would like to include.**



## **CRITERION II: TEACHING-LEARNING AND EVALUATION**

### **Teaching-Learning**

The Teaching-Learning process at Hansraj College is an innovative amalgam of traditional and modern teaching-learning methodologies. The teaching faculty is dedicated towards providing a holistic paradigm that ensures maximum gains for the students. The core principle behind classroom sessions is to encourage student-teacher interaction and a healthy exchange of ideas among the students to encourage each to think beyond the conventional boundaries of pedagogy and constantly redefine the notion of education. Each student is enabled to explore multidisciplinary opportunities available in the academic sphere, to think of and create new dimensions in his/her field of interest and last but not the least, to bring forward new perspectives and fresh thoughts in his/her field of knowledge. The college is known also for its focus on co-curricular activities that are seen not as extra-curricular but as an integral part of the teaching methodology with teachers using performance and debating as part of their classroom teaching.

With this as the vision and objective of teaching and learning, Hansraj College has always aimed to continue growing as an institution of excellence in education and co-curricular activities alike.

### **2.1 Student Enrollment and Profile**

#### **2.1.1 How does the college ensure publicity and transparency in the admission process?**

Being an institution of repute, each year, large number of students, from all over the country apply for admission to Hansraj College. In order to make the admission procedures student-friendly and a hassle free experience for the students and their parents/guardians accompanying them, the college Admission Committee ensures that the admission process is well organized and systematic. Due procedures are followed to ensure transparency and publicity during the admission process.

The college has a dynamic and involved Alumni Association consisting of internationally renowned figures in all fields, who have made a stellar contribution in enhancing the college's reputation and encouraging students to seek admission here.

- **Admission Committee**

An Admission committee is constituted after due deliberations in the staff council. The committee comprises of the following:

- College Principal
- Convenor – Arts & Commerce stream
- Convenor – Science stream
- Teachers-In-charge of all the departments
- Hostel Warden
- Convenor – ECA
- Convenor – Sports



The committee is responsible for the following:-

- Ensuring uniformity in the admission procedures by all departments.
- Deciding the cut-off marks for each subject based on the previous year's data and the current list of applicants.
- Ensuring adherence to University guidelines during the admission process.
- Immediately address and resolve the discrepancies encountered, if any.

- **Help Desk**

For the benefit of students and parents, an 'Information/Help Desk' is set up to cater to their queries and doubts. Consisting of both teachers and students, this desk provides help in solving most problems and assuaging the frustrations often felt by parents and students while seeking admission. It provides them answers relating to cut-offs, filling up of admission forms, minimum eligibility criteria for admission to various courses, clarifications about the lists of documents required to be submitted along with application forms, among others.

- **Publicity & Transparency**

- The admission notice is made available on the College website, college notice boards, local news channels and newspapers. The admission notice is also available on the University of Delhi website.
- Detailed guidelines for admission, minimum eligibility criteria for every course open for admission, fees and their mode of payment, the list of documents required to be submitted at the time of admission, information regarding ECA and Sports trials and Hostel admission are provided in the college prospectus which is made available both on the college website and the website of the University of Delhi.
- The Principal is the sole authority who interacts with and provides information to the print and electronic media relating to the admission to the college. It is ensured at all times that there is no ambiguity/confusion in the admission guidelines provided by the college.
- Two separate conveners are appointed - Science Convener and an Arts and Commerce Convener. They oversee, coordinate and are responsible for the admission to the Science and Arts & Commerce courses respectively.
- The procedures followed by the college adhere to guidelines laid down by the University. Students are granted admission only if they fulfil the minimum eligibility criteria as mentioned in the admission notice.
- Transparency is ensured in the ECA and Sports Admission by setting up an ECA Admission Committee and a Sports Admission Committee as per university norms. The trials are carried out in the presence of faculty and external experts from the respective fields of activity. Additionally, the detailed minutes of the trials and selection procedures are maintained for future reference and transparency.
- The successive cut-off lists are put up on the college website in time to ensure their timely publicity.

### 2.1.2 Explain in detail the criteria adopted and process of admission.

- Undergraduate and Postgraduate Courses
  - The admission process is centrally controlled by University of Delhi.





- The list of applicants for each course is shared with the college.
- The admission committee decides the minimum cut-off for the course. In case the seats are not filled up to the sanctioned strength, a subsequent merit list is generated with lower cut-off percentage.
- The cut-off percentage is publicized through the university website, college website and media. There is a provision for admission through sports and ECA quota (not more than 5% of over and above the total). For admission through ECA quota, weightage to be given to certificates is 25% and weightage to be given to trials is 75%. Trial is conducted at two levels. At least two external experts are invited from outside the college in the selection process.
- **Foreign Language Certificate Courses**

The College conducts part-time Certificate, Diploma and Advanced Diploma Courses in French and German. These courses are run as per the official guidelines of the University of Delhi. The teachers for these courses are deputed by the relevant department of the University of Delhi, and the examinations are also conducted as per the schedule specified by the University of Delhi.

At the end of each course, successful students receive their Certificate, Diploma or Advanced Diploma certification documents from the college office as and when supplied by the University of Delhi.

Admission to all language courses are held in the month of July, almost as soon as the regular college admissions are over. Admission notifications are displayed prominently on the college Notice Board and on the college website as well.

### **2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**



Table 2.1: Category wise Maximum and Minimum Marks Percentage for the Year 2015-16

CATEGORY	GENERAL		OBC		SC		ST		PWD	
COURSE	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
Anthropology	93	90	92	81	92	74	90	70	90	62
Botany	94	92	93	84	92	78	92	71	92	60
Chemistry	97.33	95	95.33	93	92	84	85	62	90	61
Computer Sc.	97.75	95.5	96.25	94.5	94	81	93	83	93	93
Electronics	97	95	95	91.33	93.66	85	92	74	92	88
Geology	95.33	94.33	93	92	90	88	90	70	91	88
Mathematics	97	95.75	95	95	94	93.75	94	87	94	60
Physical Sc	97	89	95	83	93	71	93	55	93	65
Physics	97.33	95.33	95.33	95.33	94	90.66	93	79	93	60
Zoology	96	94	94	89	92	89	86	80	86	62
Life Sc.	95	90.33	93	80	92	75	92	65	92	60
Commerce	97.25	96.75	95	93	93	90.25	87.25	73	94	72
Economics	98	96.5	95.5	92.25	95	89.5	93	79	95	73
English	97.5	95.5	95.5	90.25	93	91	93	87	96	78
Hindi	87	85	86	78	85	77	85	49	85	85
History	96	94.25	92	86.5	90	77	91	77	90	90
Sanskrit	72	65	70	52	65	55	65	40	65	40
BA Prog	96	95	94	81	91.5	86.5	92	86	94	84

Table 2.2: Comparison of cut off with Kirori Mal College and Khalsa College for 2015-16

S. No.	Courses		General	OBC	SC	ST	PWD	Remarks
1	B.A. Programme	HRC	95	81-87	86.5-90	86-90	73	
		KMC	91	83.75-84.25	85-85.75	83-86	89	
		Khalsa	88	*	77	75	83	
2	B.A. (Hons.) Economics	HRC	96.5	92.25	89.5	79	75	
		KMC	96-96.25	90.75-91	85.25-85.5	74.75-75	78.5-78.75	
		Khalsa	95.75	*	81	75	77.5	
3	B.A. (Hons.) English	HRC	95.5	90.25	91	87	78	
		KMC	94.75-85.5	89-90	84.75-85.25	88-89.75	88-89.75	
		Khalsa	93	*	81	79	80	
4	B.A. (Hons.) Hindi	HRC	85	78	78	49	85	
		KMC	82-84	80-81	81-83	60-70	85	
		Khalsa	82	*	74	60	81	
5	B.A. (Hons.) History	HRC	94.25	86.5	90	91	90	
		KMC	93-93.75	91.5-93	91	90-91	91	
		Khalsa	89.5	*	83	83	75	
6	B.A. (Hons.) Sanskrit	HRC	65	52	55	40	40	# Course not available
		KMC	68-70	58-60	60	40-41	40-41	
		Khalsa	#	#	#	#	#	

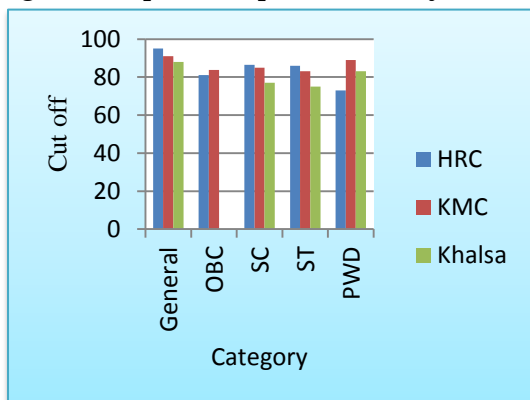


7	B. Com. (Hons.)	HRC	96.75	93	90.25	73	72	
		KMC	96.25-96.5	91.5-92.75	85.5-86.5	70-72	77.5-78.5	
		Khalsa	95.75		82.5	74.5	75	
8	B.Sc. (Hons.) Anthropology	HRC	90	81	74	70	62	# Course not available
		KMC	#	#	#	#	#	
		Khalsa	#	#	#	#	#	
9	B.Sc. (Hons.) Botany	HRC	92	84	78	71	60	
		KMC	90-93	85.33-86	79-79.9	77-78	60-64.9	
		Khalsa	87.33		77.66	68.33	49	
10	B.Sc. (Hons.) Chemistry	HRC	95	93	84	62	61	
		KMC	94-95.33	91-91.66	83-84	63-67	80-82	
		Khalsa	93	*	79.33	68.33	70	
11	B.Sc. (Hons.) Computer Science	HRC	95.5	94.5	81	83	93-94	# Course not available
		KMC	#	#	#	#	#	
		Khalsa	#	#	#	#	#	
12	B.Sc. (Hons.) Electronics	HRC	95	91.33	85	74	88	# Course not available
		KMC	#	#	#	#	#	
		Khalsa	91	*	80.33	72	61	
13	B.Sc. (H) Geology	HRC	94.33	92	88	70	88	# Course not available
		KMC	#	#	#	#	#	
		Khalsa	#	#	#	#	#	
14	B.Sc. (Hons.) Mathematics	HRC	95.75	95	93.75	87	60	
		KMC	95-95.5	92.5-92.75	90	75-76	70-73	
		Khalsa	94	*	90	72.25	69	
15	B.Sc. (Hons.) Physics	HRC	95.33	95.33	90.66	79	60	
		KMC	95-95.33	94.33-96	87-88	66-68	65-67	
		Khalsa	94	*	82.33	73.33	66	
16	B.Sc. (Hons.) Zoology	HRC	94	89	89	80	62	
		KMC	93.67-94	87-88	84-86	80-84	62-64	
		Khalsa	89.33	*	80.33	71	56	
17	B.Sc. Life Sciences	HRC	90.33	80	75	65	60	
		KMC	91-92	83-85.99	80-84.99	63-65	45-46	
		Khalsa	85	*	72	67.66	40	
18	B.Sc. Physical Sciences (Chemistry)	HRC	89	84	71	55	65	# Course not available
		KMC	#	#	#	#	#	
		Khalsa	87	*	67	55	54	
19	B.Sc. Physical Sciences (Compt. Sc.)	HRC	90	83	71	55	65	
		KMC	90.66-91	83.33-84.33	77-79	58-60	81	
		Khalsa	85.66	*	67	55	54	

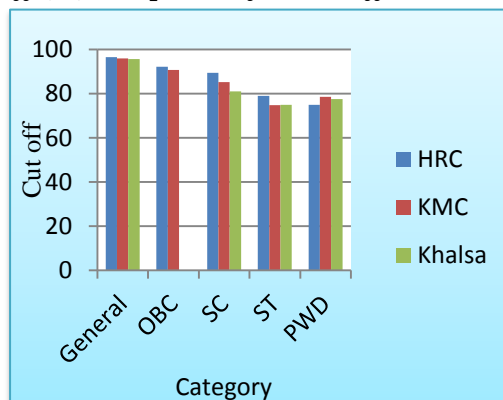
\* OBC category not available in Khalsa College



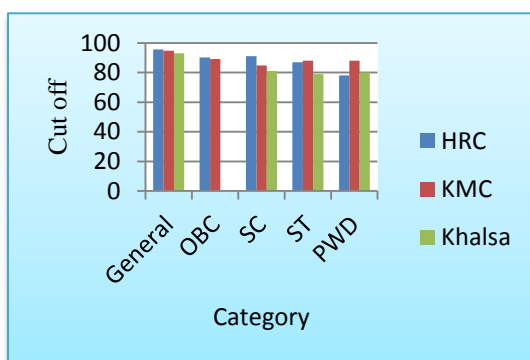
**Fig 2.1: Graphical Representation of the Cut-off (%) Comparison for the Different Courses**



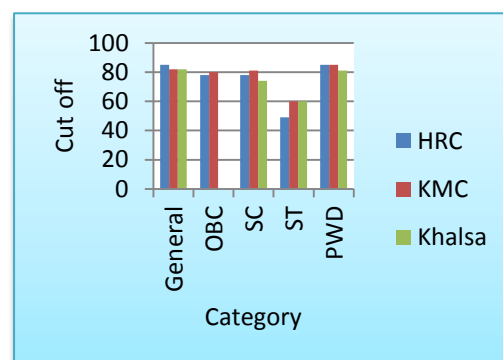
**B.A Programme**



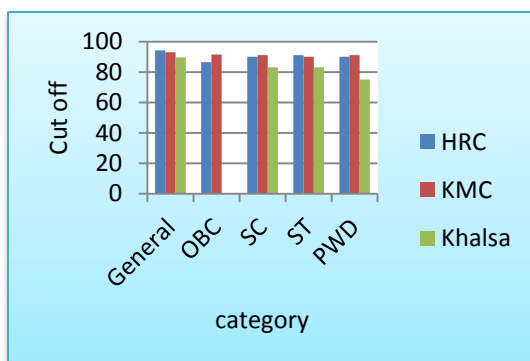
**B.A. (Hons.) Economics**



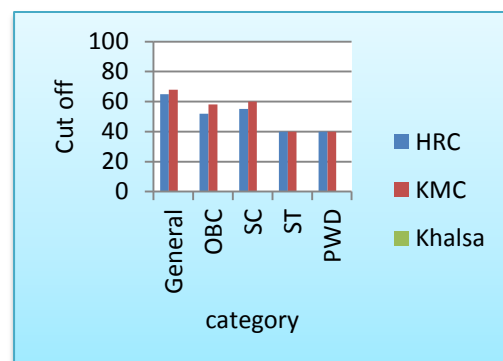
**B.A. (Hons.) English**



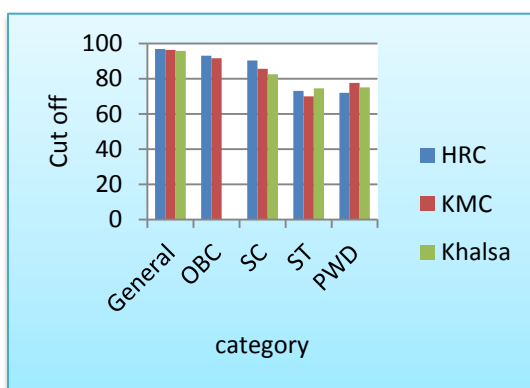
**B.A. (Hons.) Hindi**



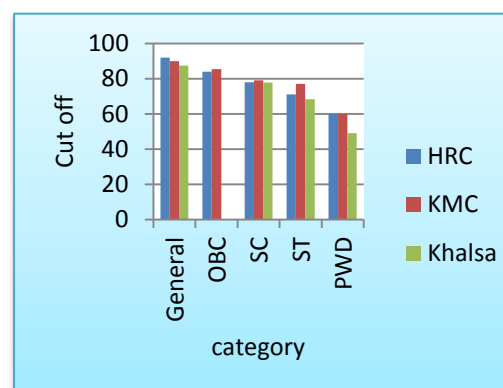
**B.A.(Hons.) History**



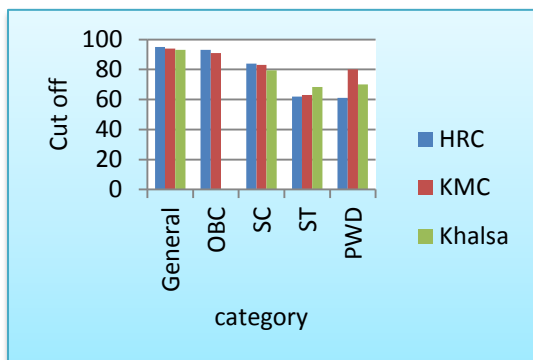
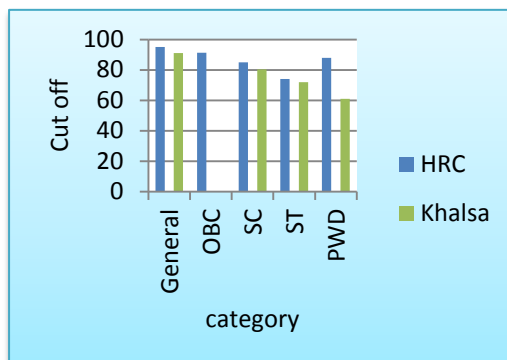
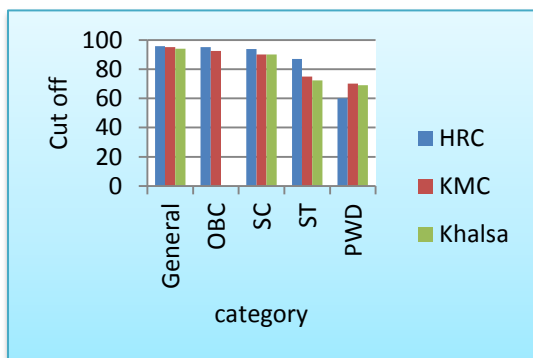
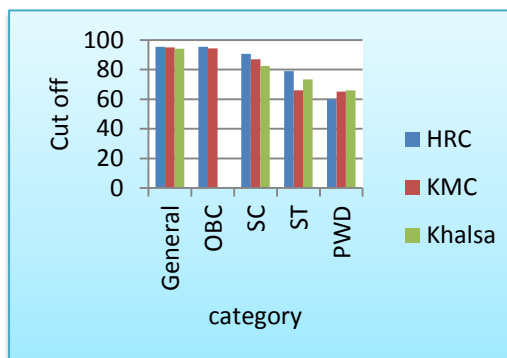
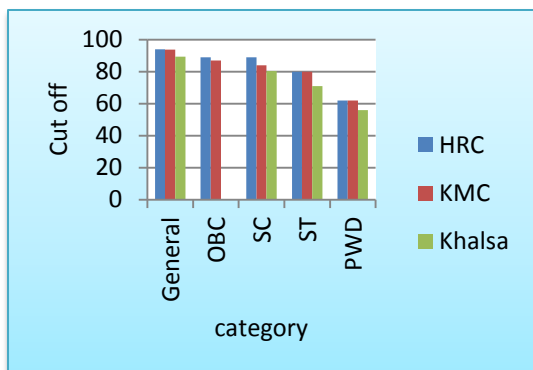
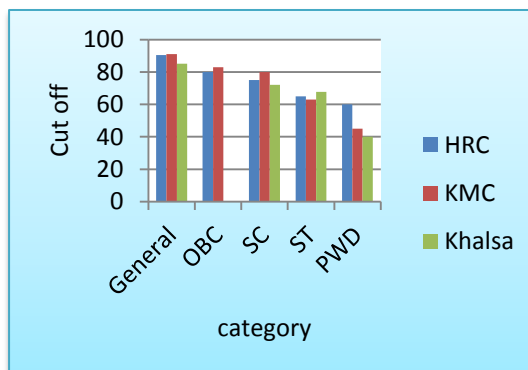
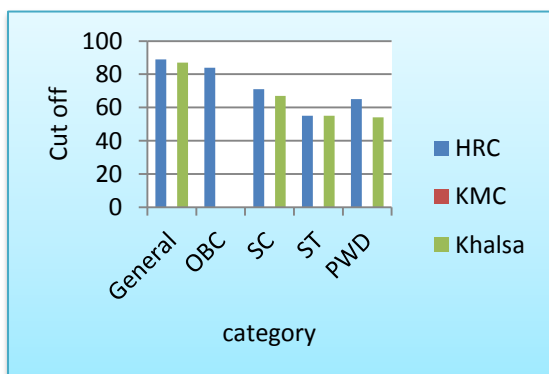
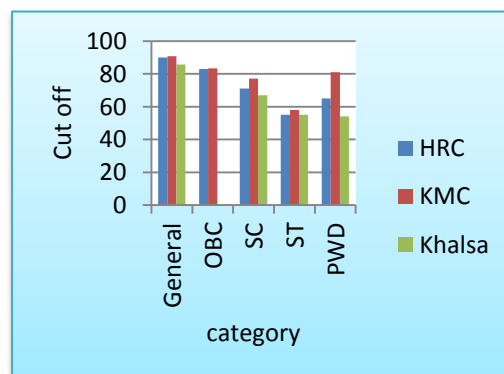
**B.A.(Hons.) Sanskrit**



**B. Com. (Hons.)**



**B.Sc. (Hons.) Botany**

**B.Sc. (Hons.) Chemistry****B.Sc. (Hons.) Electronics****B.Sc. (Hons.) Mathematics****B.Sc. (Hons.) Physics****B.Sc. (Hons.) Zoology****B.Sc. Life Sciences****B.Sc. Physical Sciences (Chemistry)****B.Sc. Physical Sciences (Compt. Sc.)**



### **2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

Post admission-

- The admission committee compiles an academic and demographic profile of the students.
- The admission process is also reviewed for accuracy, efficiency and any complaints.
- The Conveners encourage various departments to provide feedback on the admission process adopted each year. Suggestions, if any, are welcomed.
- The analysis is reviewed by the admission committee and recommendations so formulated are presented and proposed in the Staff Council meeting at the beginning of each academic session. Upon approval, they are adopted and followed during the admission the following year.

The outcome of this exercise has been positive and proved beneficial in the sense that it has made the admission process more accountable, transparent, effective and student friendly.

### **2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- \* **SC/ST**
- \* **OBC**
- \* **Women**
- \* **Differently abled**
- \* **Economically weaker sections**
- \* **Minority community**
- \* **Any other**

Hansraj College is committed to be an educational institution which nurtures and fosters the cultural diversity of our nation. Over the years, the college has admitted students from various socio-economic backgrounds and thus, cultural diversity is well reflected in the admission made every year. Within this diversity, there is focus on underprivileged sectors and communities of our society. The college pioneered small committees of teachers to look into the interests of students from the North-eastern states and to ensure a conducive environment for its women students long before these became statutory.

Needless to add, inclusion policies as framed and designed by the Government of India, the reservation guidelines of the Government of India and the guidelines of the University of Delhi are strictly adhered to, both in letter and in spirit.



In order to improve and facilitate access for students belonging to the categories mentioned in the question above, the college has taken the following steps:

- Faculty members are made available to Address the queries and grievances of the students belonging to the concerned category. This ensures that the students do not have to bear unnecessary difficulties in taking admission to the courses they are eligible to take admission in.
- Transparency in admission of students belonging to the reserved categories is maintained by verification of their documents from an online database made available by their respective state governments/central government.
- The college has constructed ramps and lifts to facilitate free movement of the PwD students in the college.
- During the time of admission, the Admission Committee tries to Address the PwD candidates at the earliest and ensures that they have a hassle free experience in taking admission to the college, subject to the fulfillment of minimum eligibility for their admission.

**Table 2.3: Gender wise Data for Admission to Various Courses in Last Five Years**

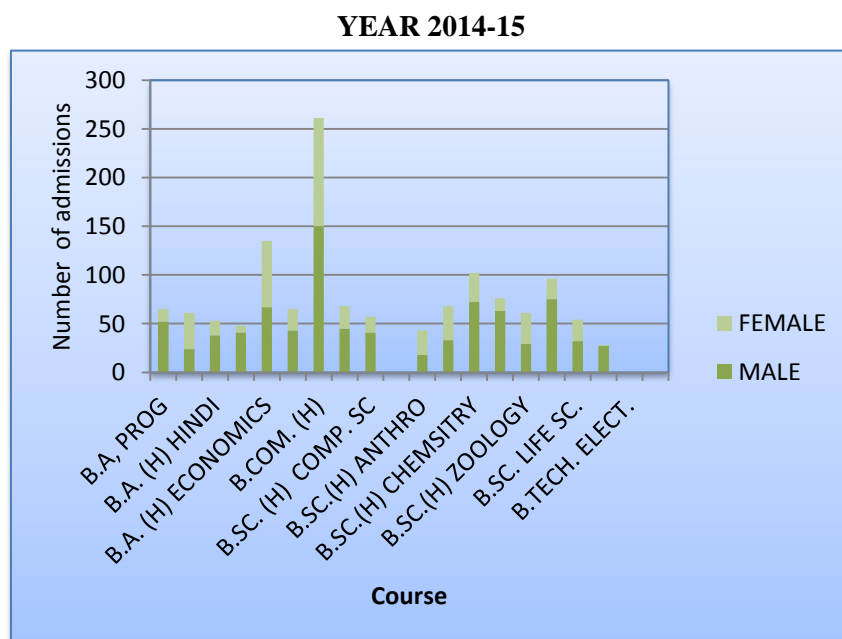
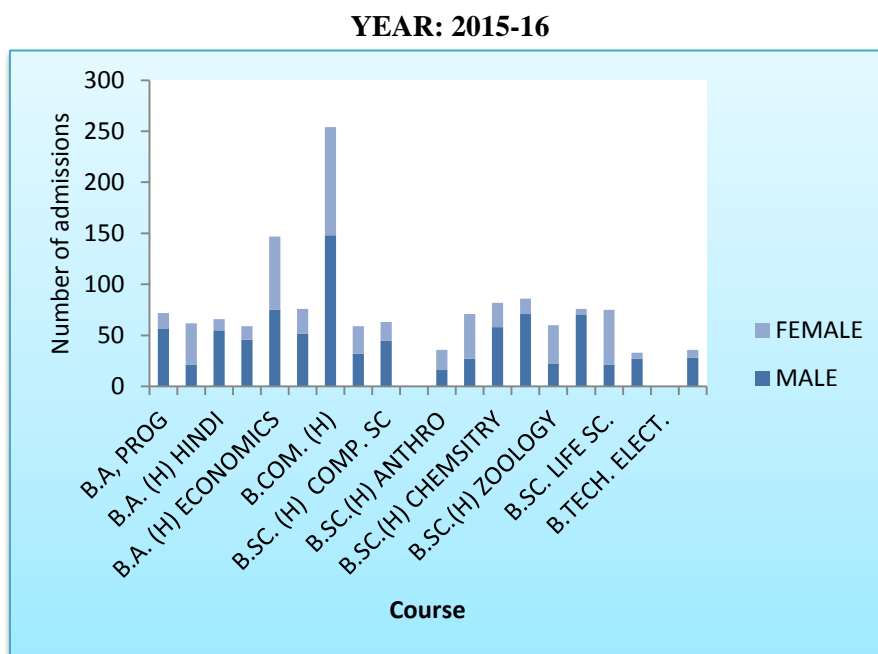
S.No	COURSE	2011-12			2012-13			2013-14			2014-15			2015-16		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	B.A. PROG	82	28	110	97	44	141	0	0	0	52	13	65	57	15	72
2	B.A. (H) ENGLISH	14	54	68	27	37	64	30	39	69	24	37	61	21	41	62
3	B.A. (H) HINDI	44	20	64	40	25	65	54	25	79	38	15	53	55	11	66
4	B.A. (H) SANSKRIT	38	11	49	50	4	54	50	8	58	41	7	48	46	13	59
5	B.A. (H) ECONOMICS	74	75	149	36	71	107	71	55	126	67	68	135	75	72	147
6	B.A. (H) HISTORY	43	18	61	30	17	47	40	24	64	43	22	65	52	24	76
7	B.COM. (H)	130	127	257	119	109	228	137	100	237	150	111	261	148	106	254
8	B.SC.(H) MATHEMATICS	30	27	57	55	13	68	46	30	76	45	23	68	32	27	59
9	B.SC. (H) COMP. SC	43	31	74	34	11	45	0	0	0	41	16	57	45	18	63
10	B.TECH. COMP. SC.	0	0	0	0	0	0	47	18	65	0	0	0	0	0	0
11	B.SC.(H) ANTHRO	15	16	31	17	14	31	20	11	31	18	25	43	16	20	36
12	B.SC.(H) BOTANY	37	33	70	41	36	77	39	39	78	33	35	68	27	44	71
13	B.SC.(H) CHEMSITRY	37	38	75	52	13	65	77	32	109	72	30	102	58	24	82
14	B.SC.(H) PHYSICS	47	16	63	66	17	83	72	16	88	63	13	76	71	15	86
15	B.SC.(H) ZOOLOGY	23	30	53	27	36	63	37	52	89	29	32	61	22	38	60
16	B.SC. PHYSICAL SC.	51	15	66	92	32	124	0	0	0	75	21	96	70	6	76
17	B.SC. LIFE SC.	26	30	56	32	26	58	0	0	0	32	22	54	21	54	75
18	B.SC.(H) ELECTRONICS	19	9	28	31	9	40	0	0	0	27	1	28	27	6	33
19	B.TECH. ELECT.	0	0	0	0	0	0	29	9	38	0	0	0	0	0	0
20	B.SC. (H) GEOLOGY	0	0	0	0	0	0	25	9	34	0	0	0	28	8	36
	TOTAL	753	578	1331	846	514	1360	774	467	1241	850	491	1341	871	542	1413

**M: Male, F: Female, T: Total**



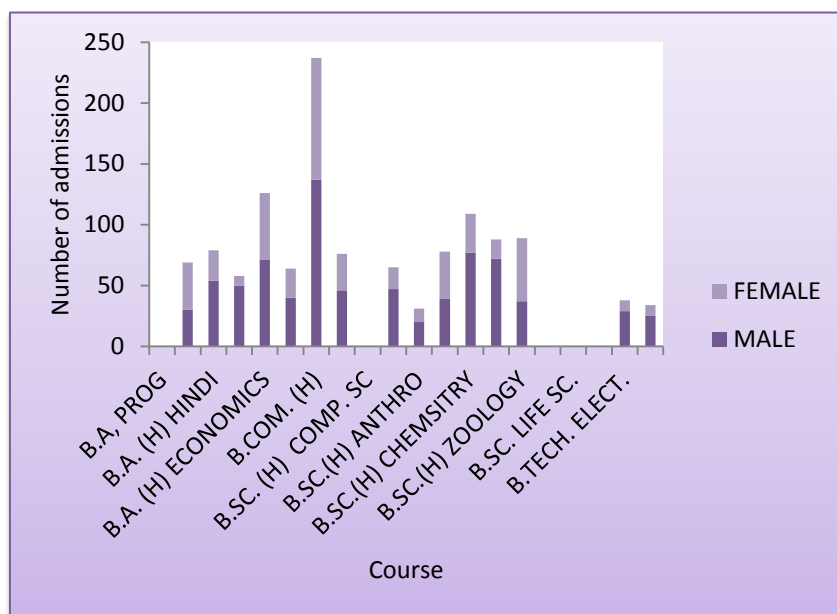


Fig. 2.2: Graphical Representation for Gender wise data





### YEAR: 2013-14



### YEAR 2012-13

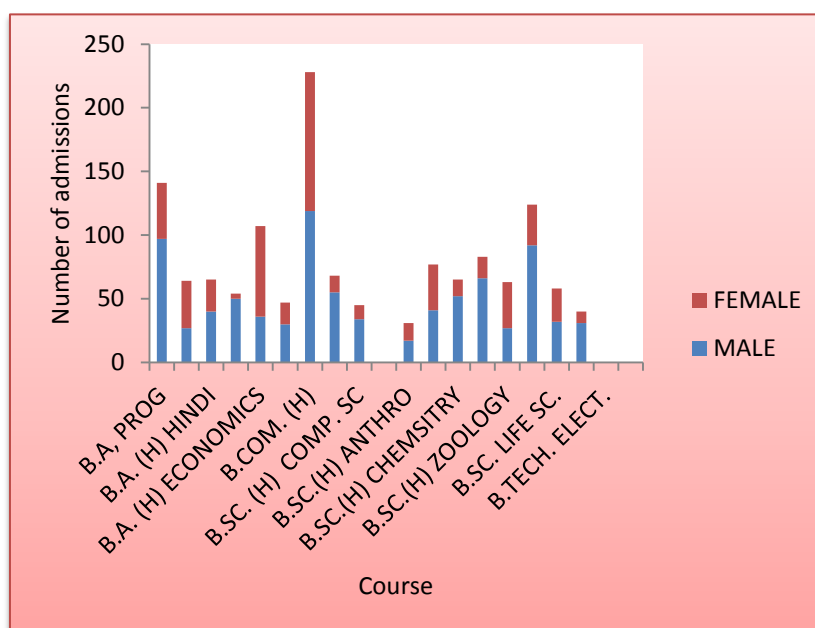




Table 2.4a: Data for Admission to Various Courses in Various Categories for Year 2015-16

S.NO.	COURSE	GEN	SC	ST	OBC	PH	FS	OTHERS	TOTAL
1	B.A. PROG	30	10	3	18	1	0	10	72
2	B.A. (H) ENGLISH	28	8	2	14	1	2	7	62
3	B.A. (H) HINDI	36	10	5	13	2	0	0	66
4	B.A. (H) SANSKRIT	35	8	1	14	0	0	1	59
5	B.A. (H) ECONOMICS	73	17	9	30	3	4	11	147
6	B.A. (H) HISTORY	29	15	5	17	3	2	5	76
7	B.COM. (H)	109	34	17	71	2	8	13	254
8	B.SC.(H) MATHEMATICS	27	8	4	18	1	0	1	59
9	B.SC. (H) COMP. SC	33	8	2	16	1	2	1	63
11	B.SC.(H) ANTHRO	17	7	2	8	0	0	2	36
12	B.SC.(H) BOTANY	41	9	6	13	0	1	1	71
13	B.SC.(H) CHEMSITRY	44	11	4	20	0	0	3	82
14	B.SC. (H) GEOLOGY	15	3	5	12	1	0	0	36
15	B.SC.(H) PHYSICS	35	11	6	29	2	0	3	86
16	B.SC.(H) ZOOLOGY	29	5	5	16	0	2	3	60
17	B.SC. PHYSICAL SC.	47	9	2	16	0	1	1	76
18	B.SC. LIFE SC.	34	10	8	19	1	3	0	75
19	B.SC.(H) ELECTRONICS	17	4	2	9	1	0	0	33
	<b>TOTAL</b>	<b>679</b>	<b>187</b>	<b>88</b>	<b>353</b>	<b>19</b>	<b>25</b>	<b>62</b>	<b>1413</b>

Fig. 2.3a: Graphical Representation for Admission to Various Courses in Various Categories for year 2015-16

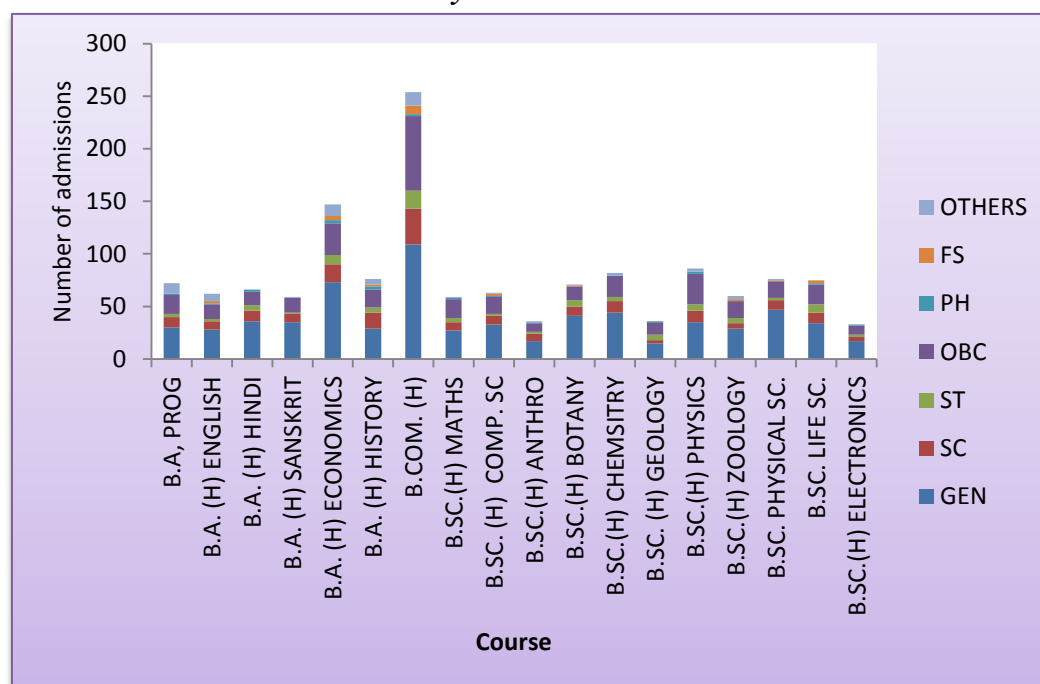




Table 2.4b: Data for Admission to Various Courses in Various Categories for Year 2014-15

S.NO	COURSE	GEN	SC	ST	OBC	PH	FS	OTHERS	TOTAL
1	B.A, PROG	34	6	4	14	1	0	9	68
2	B.A. (H) ENGLISH	25	7	4	16	1	2	6	61
3	B.A. (H) HINDI	28	8	0	15	2	0	1	54
4	B.A. (H) SANSKRIT	26	11	0	11	0	0	0	48
5	B.A. (H) ECONOMICS	65	16	8	29	1	6	7	132
6	B.A. (H) HISTORY	33	11	3	16	2	2	5	72
7	B.COM. (H)	152	30	16	58	5	9	19	289
8	B.SC.(H) MATHEMATICS	33	11	6	17	1	1	1	70
9	B.TECH COMPUTER SC.	32	7	4	12	1	1	0	57
10	B.SC.(H) ANTHRO	27	5	2	9	0	2	1	46
11	B.SC.(H) BOTANY	31	11	6	20	0	0	2	70
12	B.SC.(H) CHEMISTRY	53	10	3	35	1	0	1	103
13	B.SC.(H) PHYSICS	42	9	5	18	2	2	2	80
14	B.SC.(H) ZOOLOGY	31	9	5	16	0	2	0	63
15	B.SC. PHYSICAL SC.	61	7	1	26	0	0	0	95
16	B.SC. LIFE SC.	24	10	3	16	0	0	0	53
17	B.TECH ELECTRONICS	18	3	0	7	0	0	0	28
18	M.SC EARTH SCIENCE	22	4	3	7	0	0	0	36
	<b>TOTAL</b>	<b>737</b>	<b>175</b>	<b>73</b>	<b>342</b>	<b>17</b>	<b>27</b>	<b>54</b>	<b>1425</b>

Fig. 2.3b: Graphical Representation for Admission to Various Courses in Various Categories for Year 2014-15

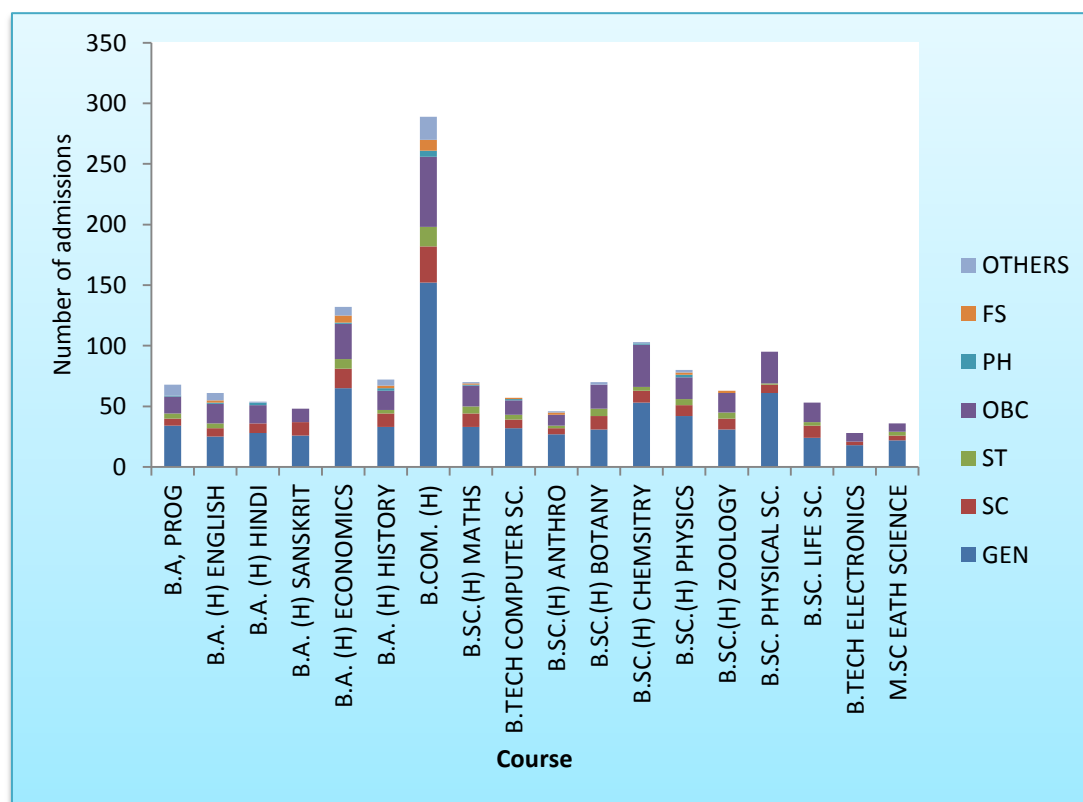




Table 2.4c: Data for Admission to Various Courses in Various Categories for Year 2013-14

S.NO	COURSE	GEN	SC	ST	OBC	PH	FS	OTHERS	TOTAL
1	B.A, PROG	0	0	0	0	0	0	0	0
2	B.A. (H) ENGLISH	30	7	4	19	1	1	7	69
3	B.A. (H) HINDI	34	16	1	22	5	0	1	79
4	B.A. (H) SANSKRIT	35	10	1	12	0	0	0	58
5	B.A. (H) ECONOMICS	56	14	12	31	1	4	8	126
6	B.A. (H) HISTORY	28	6	7	15	2	1	5	64
7	B.COM. (H)	108	32	15	53	3	9	15	235
8	B.SC.(H) MATHEMATICS	35	13	5	21	1	0	2	77
9	B.SC.(H) COMP. SC.	35	7	2	18	2	1	3	68
10	B.SC.(H) ANTHRO	17	4	2	6	1	1	0	31
11	B.SC.(H) BOTANY	38	14	5	20	0	0	1	78
12	B.SC.(H) CHEMSITRY	57	16	4	29	0	0	3	109
13	B.SC.(H) PHYSICS	48	11	4	22	0	2	2	89
14	B.SC.(H) ZOOLOGY	41	13	6	24	2	1	2	89
15	B.SC. PHYSICAL SC.	0	0	0	0	0	0	0	0
16	B.SC. LIFE SC.	0	0	0	0	0	0	0	0
17	B.SC.(H) ELECTRONICS	25	3	5	10	0	0	0	43
18	B.SC.(H) GEOLOGY	19	5	2	8	0	0	0	34
	<b>TOTAL</b>	<b>606</b>	<b>171</b>	<b>75</b>	<b>310</b>	<b>18</b>	<b>20</b>	<b>49</b>	<b>1249</b>

Fig. 2.3c: Graphical Representation for Admission to Various Courses in Various Categories for Year 2013-14

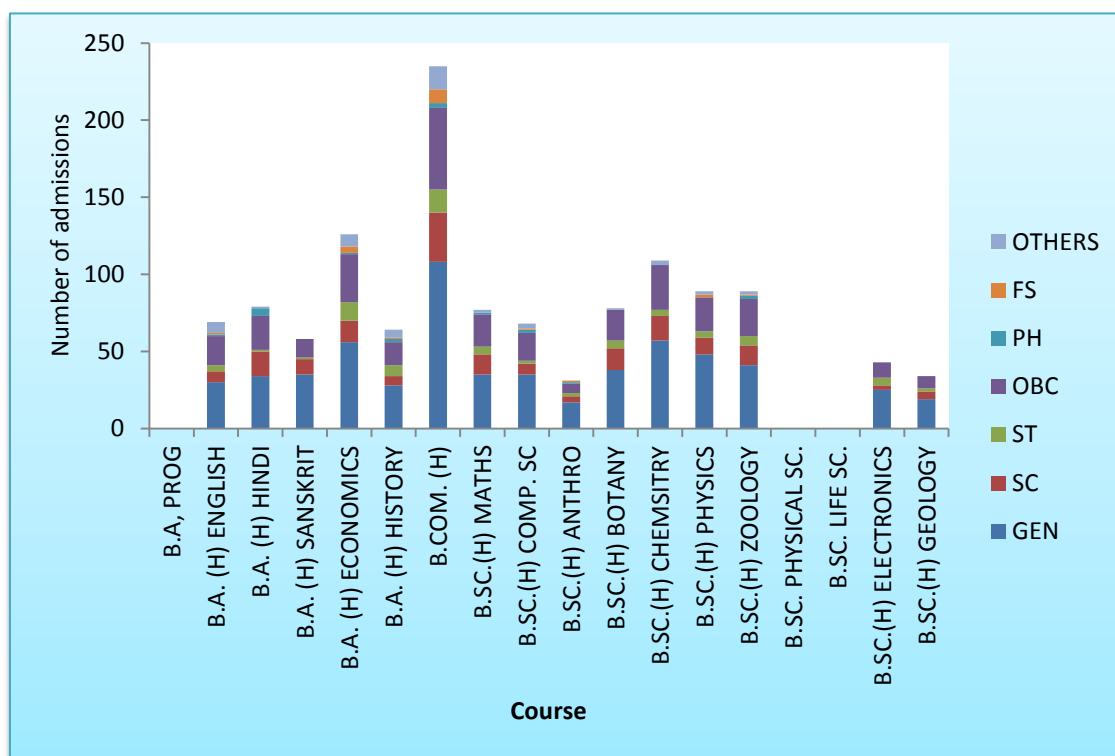
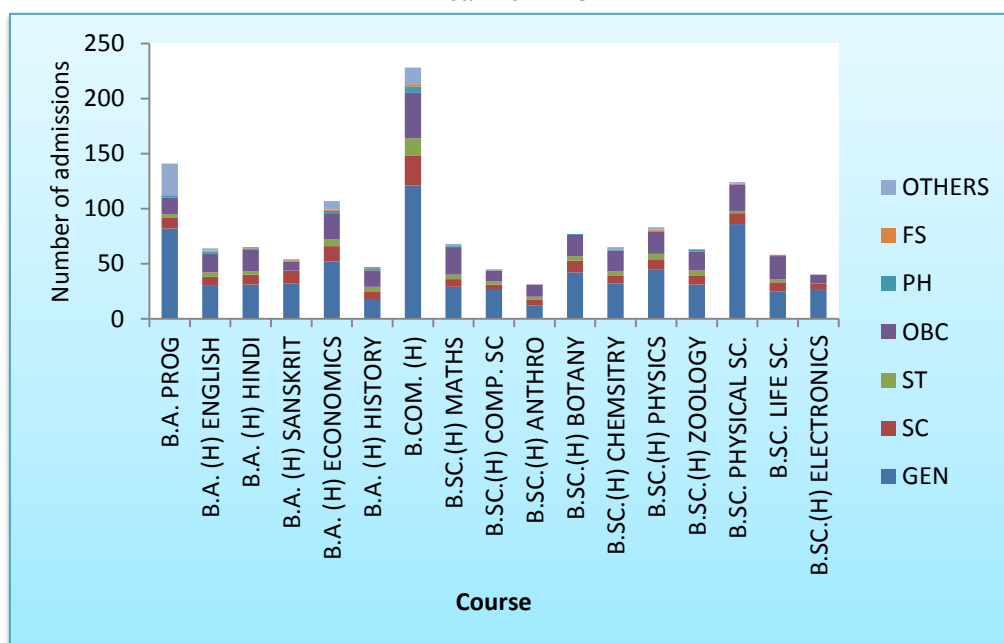




Table 2.4d: Data for Admission to Various Courses in Various Categories for Year 2012-13

S.NO	COURSE	GEN	SC	ST	OBC	PH	FS	OTHERS	TOTAL
1	B.A. PROG	82	10	3	15	2	0	29	141
2	B.A. (H) ENGLISH	30	8	4	17	2	1	2	64
3	B.A. (H) HINDI	31	9	3	20	1	1	0	65
4	B.A. (H) SANSKRIT	32	12	0	8	1	1	0	54
5	B.A. (H) ECONOMICS	52	14	6	24	2	1	8	107
6	B.A. (H) HISTORY	18	7	4	15	2	1	0	47
7	B.COM. (H)	121	27	16	41	6	2	15	228
8	B.SC.(H) MATHEMATICS	29	7	4	25	1	0	2	68
9	B.SC.(H) COMP. SC.	26	5	3	10	0	0	1	45
10	B.SC.(H) ANTHRO	12	5	3	11	0	0	0	31
11	B.SC.(H) BOTANY	42	11	4	19	1	0	0	77
12	B.SC.(H) CHEMSITRY	32	7	4	19	1	0	2	65
13	B.SC.(H) PHYSICS	45	9	5	20	1	1	2	83
14	B.SC.(H) ZOOLOGY	31	8	5	17	2	0	0	63
15	B.SC. PHYSICAL SC.	86	10	2	24	0	1	1	124
16	B.SC. LIFE SC.	25	8	3	21	0	1	0	58
17	B.SC.(H) ELECTRONICS	27	5	0	8	0	0	0	40
	<b>TOTAL</b>	<b>721</b>	<b>162</b>	<b>69</b>	<b>314</b>	<b>22</b>	<b>10</b>	<b>62</b>	<b>1360</b>

Fig. 2.3d: Graphical Representation for Admission to Various Courses in Various categories for Year 2012-13





**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends i.e. reasons for increase/decrease and actions initiated for improvement.**

In the year 2015-16, Hansraj College offered a total of 18 courses in the field of Science and Humanities for undergraduate admission under the revised course structure i.e. Choice Based Credit System.

Admission to colleges under the University of Delhi has been made through a centralized admission form from 2012 onwards. As per the instructions laid out in the Common Admission form, a student can opt for admission to any College and any Course being offered by a College. There is no restriction in terms of the number of colleges and the number of courses a candidate can apply to. Hence the total number of applications received by a college for a particular course fails to represent the actual demand for the concerned course.

Post the application submission, the university provides the data to the colleges, based on which each College decides their individual cut-off lists and students take admission in the course and college for which they are eligible.

**Table 2.5: Demand Ratio for Admission**

S. NO.	DEPARTMENT	2012-13			2013-14		
		NO. OF APPLICATION RECEIVED	NO. OF STUDENTS ADMITTED	DEMAND RATIO	NO. OF APPLICATION RECEIVED	NO. OF STUDENTS ADMITTED	DEMAND RATIO
1	Anthropology	2832	31	91.4	6039	31	194.8
2	Botany	5523	77	71.7	13766	78	176.5
3	Chemistry	17194	65	264.5	49040	109	449.9
4	Commerce	30817	228	135.2	69078	235	293.9
5	Economics	23684	107	221.3	72946	126	578.9
6	English	24124	64	376.9	93369	69	1353.2
7	Geology	1443	**	**	9340	34	274.7
8	Hindi	9247	65	142.3	38270	79	484.4
9	History	12186	47	259.3	32183	64	502.9
10	Mathematics	21966	68	323.0	33634	77	436.8
11	Physics	17291	83	208.3	25930	89	291.3
12	Sanskrit	2604	54	48.2	15852	58	273.3
13	Zoology	6610	63	104.9	10852	89	121.9
14	Electronics	12787	40	319.7	31871	43	741.2
15	Computer Sci.	15225	45	338.3	54075	68	795.2
* FOR THE YEAR 2014-15 AND 2015-16, THE DATA ON NUMBER OF APPLICATIONS IS NOT AVAILABLE							
** Data Not Available							





## **2.2 Catering to Student Diversity**

### **2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?**

Hansraj College has taken various initiatives and provided numerous platforms for differently-abled students to perform to their potential. This is after adhering to all the norms prescribed by the University. We are delighted to see these efforts bear results, with several examples of our students excelling in academics as well as winning laurels in National and International co-curricular events in sports, debate and dramatics etc.

- Every Student belonging to differently-abled category gets a full waiver for the college fee and is only entitled to give contribution to Student union fund, department and other charges
- All differently-abled students who are in hostel get a full waiver of the hostel fee and a waiver of 50% in the mess bill.
- A special cell, Enabling Unit, was structured in the college on 23<sup>rd</sup> October 2011 by Prof. Umesh Rai (director, South Campus, University Of Delhi) and college Chairman Dr. S.K. Sama to listen all grievances of such students.
- Ours is the first and the only enabling unit in the whole university to have our volunteers assist the differently-abled students in their regular course of studies. The society has more than 100 volunteers. It acts as a bridge between the college administration and differently abled students. This society also organizes various seminars and awareness campaign as well as an Annual Cultural Fest, **Pehal**, where a positive and healthy relation is observed between all differently abled students and other students in the college.
- Laptops were distributed to differently-abled students in the college as an assistive device in 2013-15.
- A recording device, Angel, is provided to visually challenged students to record their class lessons.
- I-PODs were given to all the differently-abled students.
- The college has a collection of over 200 Braille books. Braille slates and Braille chalk is also provided.
- Two lifts were constructed in 2014 to assist the orthopedically challenged students as well as visually challenged students to have their classes on 2<sup>nd</sup> floor and 1<sup>st</sup> floor.
- The Enabling Unit Room provides five computers, internet, scanning and printing devices for students.
- A separate reading- writing room is provided to such students since 2014.
- A foot-over bridge connecting two different blocks of the college, and ramps have been constructed at various places to ease the commute for differently-abled students.
- Magazines and Journals in Braille are purchased monthly.
- Students of the enabling unit are encouraged to participate in inter college programs and given much flexibility in attendance and lectures to those who go for various competitions.
- During University exams, such students are provided with a writer and an extra hour to complete the test.



- Besides there is a constant attempt on the part of all teachers and students to create a space that nurtures everyone and makes them contributors towards social development. The marker of success is that in Hansraj College students who are differently-abled feel a sense of belonging, comfort and confidence not available elsewhere.

### **2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.**

- Centralized Counselling is provided to students during the admission process to help them choose the course best suited for them. Department members further counsel students when they come for admission regarding the rigorous demands of their course, they are shown the syllabus, told what will be expected from them each semester and over three years.
- Post admission, an orientation session is conducted for the students to understand their needs in terms of knowledge and skills.
- Every department conducts sessions with new students to explain the requirements and expectations of the course, familiarize them with facilities and resources available.
- Academic profiling is created for every student during admission to assess their needs in terms of knowledge and skills.

### **2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?**

Our classes present a wide mix of students from metropolitan cities and the hinterland, proficient in English and not so proficient, different regions, different religions and different economic levels. A regular challenge is to manage this diversity and the endeavor is to create a zone of optimal development in which everyone on all sides of the different spectrums benefits. The technique is an interactive approach where the have-not student is given enabling personalized attention and those on the empowered sides of the equation also realize that they have a lot to learn from others to make a contribution to the holistic development of our society. Some measures strictly adhered to:

- Tutorials are arranged for students in small groups. Care is taken to select the groups such that there is a mix of competency levels, so that the gains are on all sides of the spectrum.
- Performance and progress of every student is monitored by the teacher during the tutorial sessions, and feedback provided.
- Students are encouraged to make presentations on their projects to build their communication and presentation skills. They are further encouraged to incorporate issues and themes specific to their region, religion and other specificities.
- Remedial English classes are conducted for some students on the need basis.
- Foreign Language (French and German) courses are offered as add-ons.
- Lectures from external faculties and researchers are arranged to provide a broad perspective to students.



- Cluster classes - In line with the University Guidelines, Hansraj College was designated to conduct Cluster Classes for B.Sc. (H) Zoology in 2012. Accordingly students from various colleges not only attended classes but also practicals. Such students were readmitted or admitted in the 3<sup>rd</sup> year of the courses concerned in their respective colleges.

### 2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

- There is an active **Women Development Cell (WDC)** to promote general awareness, gender sensitization and women empowerment amongst the students. WDC, in collaboration with IQAC, organizes various programs in the college. Students get the opportunity to interact with the invited activists on the subjects of women's rights and violence against women. Poster-making and slogan-writing competitions are often conducted to spread the awareness on these issues. WDC also regularly organizes self-defense trainings for girls in collaboration with Delhi Police.
- **Haritima**, the Environment Awareness Committee of the college, works towards sensitizing students about the need for tree plantation and recycling of resources through workshops and seminars. It also has an active e-waste management drive.
- **NSS** Hansraj has been conducting various philanthropic activities. It conducts blood-donation camps in association with **Blood Connect**. It also organizes free health checkups, and the **Pink Chain** campaign for breast-cancer and cervical cancer awareness in collaboration with doctors from AIIMS.
- A fresher's meet is conducted separately for North-eastern students and students from Ladakh to foster an inclusive environment in the campus.
- Various activities such as **Cyclothon** are organized by different societies to create awareness about environment. Some of these activities are conducted jointly with other institutions in the North Campus like Miranda House and Hindu College.
- A competition was held at Delhi Police Headquarters for creating social awareness.
- Special yoga classes are also conducted separately for boys and girls.

### 2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

The advanced learners are identified through the results of continuous internal assessments, end term examination results and day to day interaction inside and outside the class.

- Faculty members motivate them to go beyond the curriculum and explore their potential.
- They are provided with extra study material and their doubts are cleared in tutorial classes.



- The advanced learners are given opportunity to present papers in seminars or paper presentation programs at various colleges.
- Students are encouraged to undertake Innovation Projects. These projects have a strong trans-disciplinary flavor and enhance the curriculum but are not directly linked to any part of a prescribed syllabus.
- Researchers and speakers are invited to present their work and projects, to provide a broader perspective as well as research opportunities to such students.
- National level conferences are also organized by the college to provide platform to the students to connect with the leading experts.

### **2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

The college being ranked amongst top ten colleges of India attracts the students with very high percentages. However, their aspirations to pursue professional courses such as Engineering / Medical / Law weans them away as and when the results of the counselling sessions of such institutes are declared. This results in decline in the actual number of students taking exams in the first year. At times, students keep pursuing even during second year having an impact on the strength in final year.

In some cases it can also be seen that the number of students appearing in the final year are more than the number of students appeared in the first year. This is attributable to a rule of University of Delhi which permits a student to complete a course within 5 years of having taken admission. Therefore a student admitted in the year 2010 has an opportunity till the year 2015 to clear all the papers.

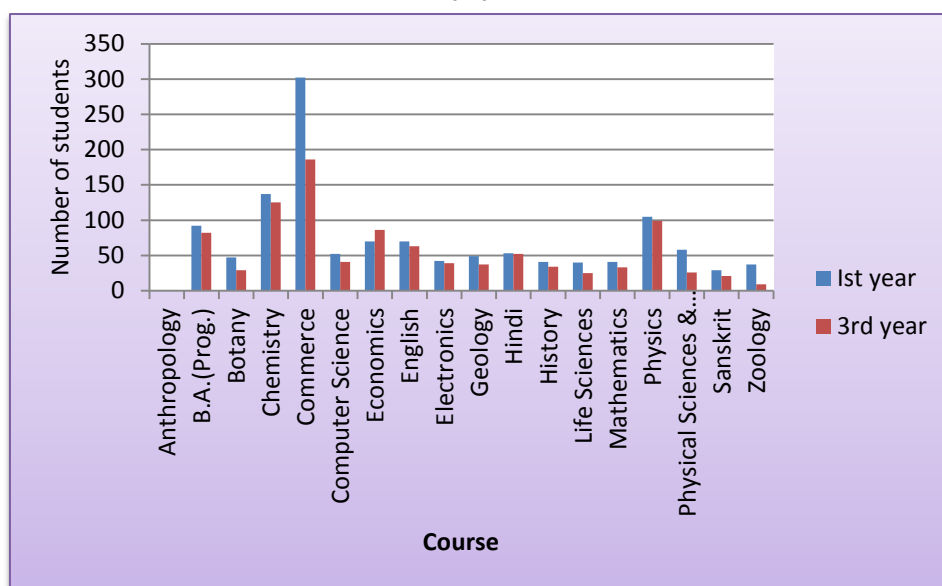
The students who are at the risk of dropping out are identified through the day-to-day interaction in the class and analysis of examination results. The following measures are taken to retain such students:

- Faculty members engage with such students to understand the reasons and risks of dropouts, and counsel them.
- Various facilities are provided to physically challenged students. (Refer to #2.2.1)
- Student volunteers provide peer support to slow learners and differently abled students.
- Student Welfare Committee provides fee concession to the economically deprived students.
- The college offers a number of scholarships as financial aid or as merit reward. If applicable, scholarships are also arranged for such students.
- If a student is unable to cope with a particular course, he/she is given the permission to change the course as per university guidelines.



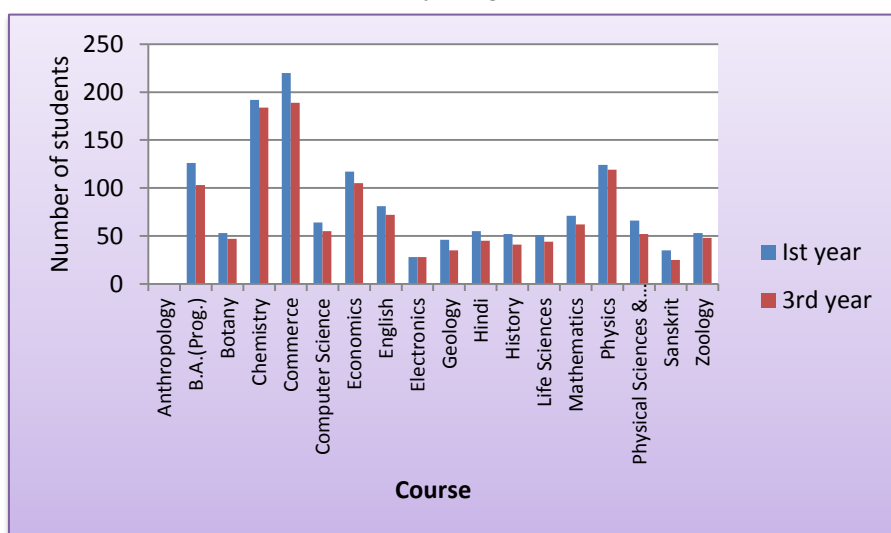
Table 2.6: drop-out Data

Course	2010-2012		2011-2013		2012-2014		2013-2015	
	Ist year	3rd year	Ist year	3rd year	Ist year	3rd year	Ist year	3rd year
Anthropology	NA	NA	NA	NA	29	29	28	30
B.A.(Prog.)	92	82	126	103	86	72	120	122
Botany	47	29	53	47	64	60	71	78
Chemistry	137	125	192	184	71	84	65	68
Commerce	302	186	220	189	245	224	220	248
Computer Science	52	41	64	55	71	56	43	43
Economics	70	86	117	105	135	125	98	132
English	70	63	81	72	67	58	56	71
Electronics	42	39	28	28	23	26	37	31
Geology	49	37	46	35	29	23	NA	NA
Hindi	53	52	55	45	57	48	59	65
History	41	34	52	41	54	44	43	52
Life Sciences	40	25	51	44	49		49	50
Mathematics	41	33	71	62	54	49	68	68
Physics	105	99	124	119	61	58	75	82
Physical Sciences & Applied PS	58	26	66	52	55	65	107	113
Sanskrit	29	21	35	25	39	32	39	39
Zoology	37	31	53	48	44	41	56	57

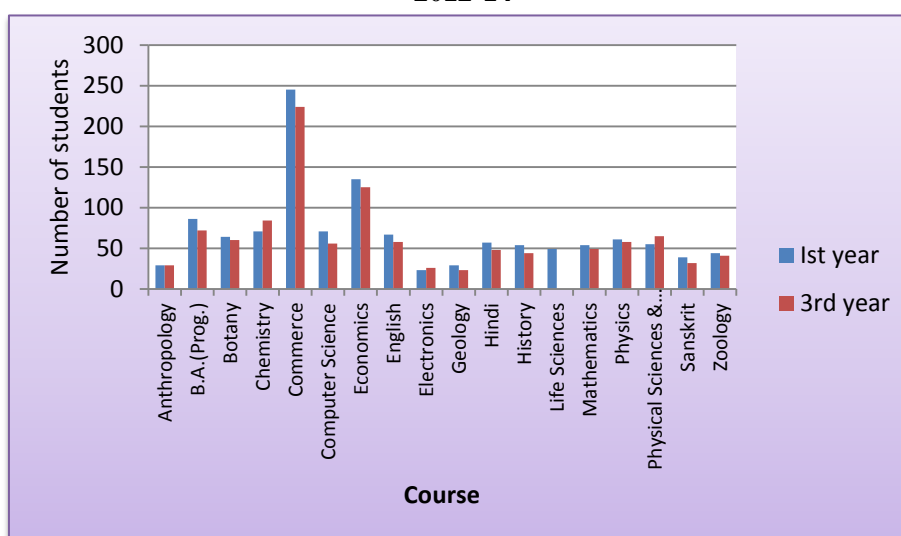
Fig. 2.4: Graphical Representation for drop-out Data (Number of Students on Y-axis)  
2010-12



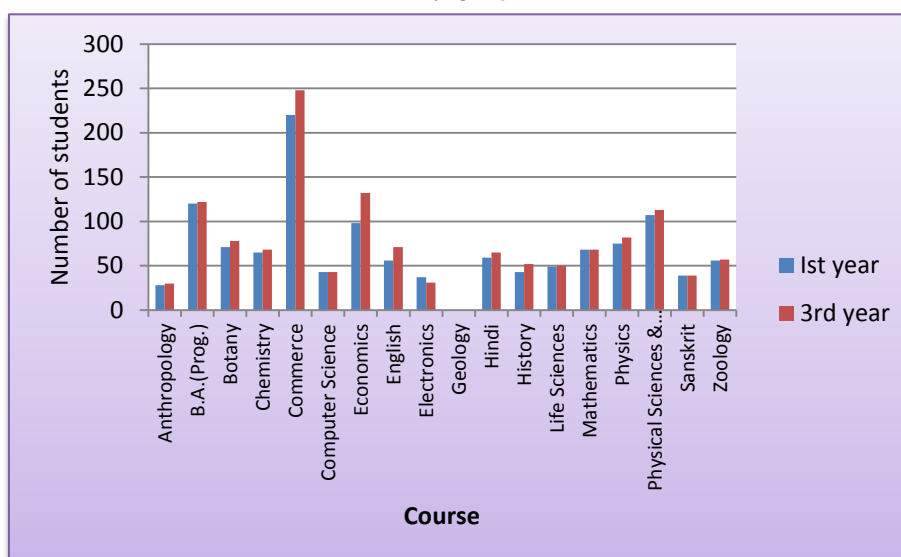
2011-13



2012-14



2013-15





## **Teaching-Learning**

### **2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)**

- The College follows the academic calendar notified by University of Delhi.
- Before the commencement of the session, each department prepares teacher-wise and paper-wise teaching workload for individual faculty members by taking into account their preferences, expertise and curriculum requirement. The workload is forwarded to the central time table committee which creates the timetable for every department.
- The time-table is displayed on the college website before the beginning of the every semester.
- A schedule is prepared for collecting the continuous class assessments in terms of tutorials, project presentations, class tests and other modes adopted by teachers for assessment and a deadline is fixed for submitting the marks.
- The attendance of students is submitted on a monthly basis and regularly updated on the college website.
- The teacher in-charge reviews the progress periodically and takes corrective action such as arrangement of extra classes as per requirement.
- The academic calendar is made available to the students in advance. The departments are provided academic autonomy to organize field trips, visits to laboratories and other institutions within the framework of the academic calendar.

### **2.3.2 How does IQAC contribute to improve the teaching-learning process?**

- Quality parameters and key performance indicators are designed for every course for every department by the IQAC. The KPIs are shared with the department. The IQAC monitors the status of the KPIs and takes corrective action if there is any deviation.
- The IQAC reviews the academic progress of every department and conducts the session audit.
- The IQAC encourages the faculty to take part in FDP and FIP.
- The IQAC encourages faculties to participate in ICT workshop. For example, three faculties are nominated to take part in ICT training workshop organized by Microsoft in FMS, New Delhi.
- The IQAC has approved purchasing of teaching aid software.
- The IQAC has recommended setting up advanced ICT facilities for all departments.

### **2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?**

The college has created an environment that is geared towards improving the human quotient in each student. Regarding teaching not as pedagogy but as stimulation of rational mind the teaching modes are highly interactive where having discussions, raising questions and debating ideas is constantly encouraged. There is space for independent individual thought





and for sharing it with peers and students thus ensuring a constant exchange of ideas apart from the learning process for the students.

- Each 1st year student of the erstwhile FYUP had been provided with a laptop to facilitate learning through ICT and preparing projects.
- Laptops are given to teachers for taking classes in audio-visually equipped classrooms where Internet facility is provided through Wi-Fi network of University of Delhi.
- Personal Laptops of Faculty members are registered for availing Wi-Fi services.
- E-resources are available through University of Delhi Library System (DULS) for independent learning.
- Field work, study tours, visits to prestigious laboratories and industries, and other co-curricular excursions are organized by many departments to give the students a 'hands-on' exposure to the real world and to bridge the academia – industry gap.

#### **2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

Realizing that the three parameters listed above are key to any learning and that critical thinking, creativity and scientific temper constitute the methodology of any meaningful learning process the college has created a space where such development takes place.

- Team spirit is inculcated among the students by encouraging them to submit projects in groups. The brain storming sessions not only help them teach each other but also make them more aware of the dynamics of the human relations.
- The college encourages departments to organize various co-curricular activities like seminars, conferences and workshops for students.
- Students are also encouraged to think out of the box and come up with innovative ideas. These ideas are then transformed into small one year Innovation Projects (funded by University of Delhi) which are completed by a team of 10 students under the guidance of at least 3 teachers from inter-disciplinary courses. Currently there are 13 innovation projects in the college, a 30% increase from last year, when we had 10 such projects.
- Different teaching methods such as micro teaching, case studies, simulation and group discussion are followed for making Teaching-Learning process more interesting for the students.
- Creativity of students is nurtured by organizing various competitions such as painting, poster-presentation, rangoli making, creative writing, photography, debating, dramatics, dance and music – by the various extra-curricular societies and clubs of the college.



**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

The following facilities are available to the faculties for effective teaching:

- Wi-Fi campus
- Connection to online e-library through dedicated connection provided by University of Delhi
- ICT enabled classrooms
- Laptops are made available through erstwhile FYUP scheme

**2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

- Every department organizes lectures by experts and holds seminars, conferences and workshops at regular intervals. During the last 4 years nearly 90 Conferences / workshops / seminars were organized by various departments. The details can be referred at 3.1.6.
- Faculty members are encouraged to take part in faculty development programs including Orientation Programmes and subject specific Refresher Programme organized by UGC recognized universities and institutes.
- Faculty is also encouraged to update their ICT skills by participating in various workshops. For example, three faculty members of the college recently participated in the ICT workshop conducted by Microsoft at FMS, Delhi.
- Interdisciplinary research is promoted in the institution to blend the boundaries between different subjects.

**2.3.7 Detail process and the number of students (benefitted) on the academic, personal and psycho-social support and guidance services (professional Counselling/mentoring/academic advice) provided to students?**

- Every teaching faculty member is accessible to the students. The students are encouraged to contact the faculty if they require any academic, personal and social support. The teacher is not just a teacher but truly a mentor and a guide.
- A psychological counselling cell is available in the institution. Internal faculty also provides advice and psychological guidance. If necessary, students are referred to specialists.
- A career counselling and placement cell is in place to guide the students for optimal career choices.
- Lectures, workshops and counselling sessions are also organized on several social issues ranging from abuse, domestic violence to self-defense by the various central societies of the college such as the Women Development Cell, the NSS and the NCC.

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

There are a number of innovative teaching practices followed in the institution such as

- Encouraging the students to submit group projects to inculcate the spirit of team work, realise the importance of division of labor and understand the ways of improving efficiency by working collectively.
- Promoting inter-disciplinary research amongst students to not only bring out their innovative ideas but also give them an opportunity to interact with their peers outside of their classrooms. This provides a healthy environment for exchange of ideas.
- Taking up Innovation Research Projects (funded by the University of Delhi) and providing students a platform to get a 'hands-on' experience to test and verify the theories in practice.
- Organizing various seminars, conferences, workshops, visits to prestigious institutes, group discussions and panel discussions for the students.
- Discussing case studies, showing demonstrations in classes, wherever applicable.

**2.3.9 How are library resources used to augment the teaching-learning process?**

The institution has a well-equipped central library along with departmental libraries for Science courses. In addition, the institution has a dedicated connection to the e-library resource run by the University of Delhi.

Faculty members and students are encouraged to make use of the library. Some of the library resources, such as the online library by University of Delhi are also available online. There are separate study halls for the faculties and the students. Internet facilities are available in the library.

For further details refer 4.2 on Library Resources.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

The curriculum is usually completed within the planned time frame. Following steps are taken to minimize the loss of teaching hours and ensure the timely completion of curriculum:

- Students are advised to maintain separate time slots for academic and co-curricular to avoid confusions and time loss.
- Encouraging the faculty to go for faculty development programmes such as orientation and refresher courses, at the end of semester.
- Identifying in advance, leave or planned unavailability of any faculty and taking appropriate actions, such as appointing teachers on ad-hoc/guest basis as replacement or allocation of extra classes, allocation of classes to another faculty member etc.



### **2.3.11 How does the institute monitor and evaluate the quality of Teaching-Learning?**

For every department, KPIs are defined by the IQAC in consultation with the Head of the Departments. The KPIs are monitored on a continuous basis to understand the quality of Teaching-Learning. For any deviation, corrective actions are taken.

Each department monitors the quality of Teaching-Learning process by various methods which include taking informal feedback from the students, monitoring their attendance and providing them timely guidance and analyzing the results of each course after every semester.

In addition, certain other parameters such as academic performance, number of teaching days, extra classes conducted etc. are monitored by the IQAC. IQAC always encourages the teachers to make use of the latest ICT tools and techniques and student centric learning methodologies.

## **2.4 Teacher Quality**

### **2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.**

- There are three categories, namely Permanent, Ad-hoc and Guest, under which faculty members are recruited in college.
- Recruitment of faculty for the sanctioned posts is controlled by the university in accordance with the workload of each department.
- For the permanent posts, the college advertises the posts in relevant categories as per roster in leading national newspapers and College website. The applications received are scrutinized for the eligible candidates, as per University guidelines. A Selection Committee comprising the Chairperson of the GB, the Principal, the Head of the concerned department at the University, Subject Experts, Observers, University Officials, conduct the interviews and forms a panel of candidates on the basis of merit. These candidates are offered appointments as per the prepared panel.
- For recruitment of the guest and ad-hoc faculties, an interview committee, comprising the Principal, teacher-in-charge, subject expert and an observer from SC/ST is constituted. The eligible candidate, whose name appears on the adhoc panel of respective department is appointed as adhoc/guest faculty.
- A number of facilities are provided to the faculties for retention of qualified teachers. In addition to the standard welfare schemes available to the faculties through the university or the Govt., at the college level, multiple facilities such as approval of study leaves, providing housing facility, arranging yoga classes for faculty members. Adequate arrangements are made to enable faculty members to pursue Orientation and Refresher Courses organized not only by the University of Delhi but by



universities all over the country. Members are further encouraged to participate in National and International seminars and conferences to serve the need of consistent faculty enhancement. Many of our faculty have participated in such seminars and also conducted workshops in India and abroad on their areas of expertise. Inculcating a sense of camaraderie among colleagues and maintaining high levels of confidence have been integral ingredients in the management of human resource.

**2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- The faculty from various departments, attend the orientation and the refresher courses in the subject specific as well as inter-disciplinary area to update itself about latest research and technology.
- Workshops, seminars and conferences were organized at the departmental levels. Lectures of various eminent speakers from disciplinary backgrounds were conducted which enlightened the faculty as well as students about latest research and technology.
- As a result of faculty exchange programme the college has been benefitted.
- College appoints qualified guest faculties as per norms to teach new programmes.
- The college has an optimal mix of younger and senior faculty and many opportunities of intra and inter departmental exchange enable colleagues to gain from each other's experience and remain abreast with the latest.

**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

- Study leave had been granted to 12 (twelve) faculty members from various departments to pursue Ph.D/Post doctoral research during the last 4 years (Refer 3.1.3 for details).
- The faculty members had been relieved from duties to attend workshops, seminars, conferences, orientation and refresher courses.
- The institution has sent many teachers for enhancing their knowledge through Faculty Development Programmes (4 Weeks Orientation and 3 Weeks Refresher Courses) during the last four years.

**Table 2.6: Details of FDP (Faculty Development Programmes)**

Department	Name Of Faculty	Program	Date	Organized by
Mathematics	Mr. Rakesh Batra	Refresher Course in Mathematics and Operational Research	04.01.2011	Centre of Professional Development in Higher Education (CPDHE), University of Delhi
Economics	Mr. Animesh Naskar	Orientation Programme	10.01.2011	Academic Staff College (ASC), Jamia Millia Islamia
Economics	Ms Madhvi Moni	Orientation Programme	10.01.2011	ASC, Jamia Millia Islamia
Commerce	Ms Sonal Gupta	Refresher course in commerce	31.01.2011	CPDHE, University of Delhi
Commerce	Dr. Meghna Malhotra	Refresher course in commerce	31.01.2011	CPDHE, University of Delhi
Economics	Ms Kapila Mallah	Orientation Programme	05.02.2011	ASC, Himachal Pradesh University, Shimla
Zoology	Dr. Dinesh Kumar Gautam	Refresher Course in Life Sciences	15.02.2011	CPDHE, University of Delhi
Commerce	Dr. Meghna Malhotra	Orientation Programme	20.06.2011	CPDHE, University of Delhi
Physics	Dr. Chetana Jain	Orientation Programme	20.06.2011	CPDHE, University of Delhi
Botany	Dr. Monika Koul	Refresher Course	07.07.2011	CPDHE, University of Delhi
Botany	Dr. Anand Sonkar	Refresher Course in Life Science	15.2.2011	CPDHE, University of Delhi
Commerce	Ms Sudesh Kumari	12th Refresher course in Commerce & Business Management	09.08.2011	Jamia Millia Islamia
Economics	Ms Sonam	Orientation Programme	30.09.2011	Jamia Millia Islamia
Computer Science	Dr. Baljeet Kaur	Operations Research and Mathematics	11.12.2011	CPDHE, University of Delhi
Electronics	Dr. Amit Sehgal	Refresher Course in Research Methodology	12.12.2011	CPDHE, University of Delhi
Physics	Dr. Chetana Jain	Refresher Course in Research Methodology	12.12.2011	CPDHE, University of Delhi
Botany	Dr. Romila Rawat Bisht	Orientation Programme (OR-69)	13.12.2011	CPDHE, University of Delhi
Chemistry	Dr. Aparna Garg	Orientation Programme (OR-69)	13.12.2011	CPDHE, University of Delhi
Mathematics	Mr. Rakesh Batra	Orientation Programme (OR-69)	13.12.2011	CPDHE, University of Delhi





Zoology	Dr. Kaveri Chakraborty	Orientation Programme (OR-67)	20.6.2011	CPDHE, University of Delhi
Physics	Ms Bhavna Vidhani	Orientation Programme (OR-69)	13.12.2011	CPDHE, University of Delhi
Physics	Dr. Hema Chutani	Orientation Programme (OR-69)	13.12.2011	CPDHE, University of Delhi
Mathematics	Dr. Arvind	Orientation Programme	13.12.2011	CPDHE, University of Delhi
Zoology	Dr. Lokesh Chandra Mishra	Orientation Programme (OR-70)	25.7.2012	CPDHE, University of Delhi
Economics	Mr. Animesh Naskar	Refresher course in Economics	01.01.2012	Academic Staff College, Jamia Millia Islamia
Commerce	Ms Sneha Suri	Orientation Programme	04.01.2012	Jamia Millia Islamia
Economics	Ms Kapila Mallah	Refresher course in Economics	12.03.2012	CPDHE, University of Delhi
Chemistry	Dr. Chetna Gupta	Orientation Programme at CPDHE - OR-70	21.07.2012	CPDHE, University of Delhi
Physics	Dr. Maya Verma	Orientation Programme OR-70	21.07.2012	CPDHE, University of Delhi
Commerce	Dr. Sushma Rani	Orientation Programme	06.07.2012	Guru Jambheshwar University of Science & Technology
Mathematics	Ms. Kriti Wadhwa	Orientation Programme	10.07.2012	Himachal Pradesh University, Shimla
Chemistry	Dr. Anjali Saxena	Orientation Programme	21.07.2012	CPDHE, University of Delhi
Commerce	Ms Sonal Gupta	Orientation Programme OR-100	04.09.2012	UGC-ASC, Jamia Millia Islamia New Delhi
Economics	Ms Sucharita Khuntia	Orientation Programme OR-100	04.09.2012	UGC-ASC, Jamia Millia Islamia New Delhi
Economics	Ms Simran Sethi	Orientation Programme OR-100	04.09.2012	UGC-ASC, Jamia Millia Islamia, New Delhi
Physics	Ms Bhavna Vidhani	Refresher Course in Physics and Electronics	20.09.2012	CPDHE, University of Delhi





Physics	Dr. Chetana Jain	Refresher Course in Physics and Electronics	20.09.2012	CPDHE, University of Delhi
Physics	Dr. Hema Chutani	Refresher Course in Physics and Electronics	20.09.2012	CPDHE, University of Delhi
Commerce	Ms Sudesh Kumari	Orientation Programme OR-102	10.10.2012	Jamia Millia Islamia
Commerce	Dr. Manisha Verma	Refresher course - Commerce and Business Management	20.11.2012	Jamia Millia Islamia
Chemistry	Dr. Aparna Garg	Refresher Course in Chemistry	26.12.2012	CPDHE, University of Delhi
English	Ms.Priyanka Verma	Refresher Course	13.12.2012	Jamia Millia Islamia
English	Ms.Nabanita Chakraborty	Refresher Course in Womens Studies	15.10.2012	CPDHE, University of Delhi
Chemistry	Dr. Anjali Saxena	Refresher Course in Chemistry.	26.12.2012	CPDHE, University of Delhi
Sanskrit	Dr.Ranjeet Kr.Mishra	Refresher Course in Women Studies	24.9.2012	CPDHE, University of Delhi
Botany	Dr. Romila Rawat Bisht	Refresher Course in Life Science/ Biological Science/ Bioinformatics	25.02.2013	CPDHE, University of Delhi
English	Mr.Arnab Dasgupta	Orientation Programme	6.6.2013	Jamia Millia Islamia
Botany	Dr. Anand Sonkar	Refresher Course in Environmental Studies	7.01.2013	CPDHE, University of Delhi
Chemistry	Dr.Pratibha Tiwari	Orientation Programme (OR-75)	10.05.2013	CPDHE, University of Delhi
Mathematics	Dr. Arvind	Refresher Course in Mathematics	14.12.2013	CPDHE, University of Delhi
English	Ms.Nabanita Chakraborty	Orientation Programme	17.7.2013	CPDHE, University of Delhi
Mathematics	Mr. Rakesh Batra	Refresher Course in Mathematics/Computer Sciences/Operational Research	02.01.2013	CPDHE, University of Delhi
Sanskrit	Dr. Satessh Kumar Mishra	Refresher Course	01.03.2013	CPDHE, University of Delhi
Hindi	Dr. Rajesh Kumar Sharma	Refresher Course	01.03.2013	CPDHE, University of Delhi
Computer Science	Dr. Baljeet Kaur	Refresher course in Computer Science Information Technology	22.07.2013	ASC, Jawaharlal Nehru University



Chemistry	Dr. Aparna Bansal	Orientation Programme for foundation course in Science and Life	19.08.2013	CPDHE, University of Delhi
Electronics	Dr. Amit Sehgal	Refresher Course in Physics & Electronics	16.09.2013	Academic Staff College, Jawaharlal Nehru University
Commerce	Dr. Sonal Sharma	Refresher Course in Commerce & Business Management	22.10.2013	Jamia Millia Islamia
Commerce	Dr. Sonal Sharma	Refresher Course in Women Studies	22.12.2013	CPDHE, University Of Delhi
Zoology	Dr. Lokesh Chandra Mishra	Refresher Course in Life Sciences/Biological Sciences/ Bioinformatics	16.3.2013	CPDHE, University of Delhi
Philosophy	Dr. Bhanu Bhupendra Sharma	Refresher Course in Women Studies	19.12.2013	CPDHE, University of Delhi
Philosophy	Dr. Aamir Riyaz	Orientation Programme (OR 74)	20.06.2013	CPDHE, University of Delhi
Botany	Dr. Archana Singh	Refresher Course in Life Science	25.02.2013	CPDHE, University of Delhi
Hindi	Dr. Rajesh Kumar Sharma	Orientation Programme	09.06.2014	CPDHE, University of Delhi
Sanskrit	Dr. Satessh Kumar Mishra	Orientation Programme	09.06.2014	CPDHE, University of Delhi
History	Mr. Yogender Dayma	Orientation Programme	02.07.2014	CPDHE, University of Delhi
Commerce	Ms. Sonal Gupta	15 <sup>th</sup> Refresher Course in Commerce and Business Management	10.09.2014	ASC, Jamia Millia Islamia
Sanskrit	Dr. Avnish Kumar	Refresher Course in Sanskrit	19.7.2014	CPDHE, University of Delhi
Sanskrit	Dr. Ranjeet Kr. Mishra	Refresher Course in Sanskrit	30.6.2014	CPDHE, University of Delhi
Botany	Dr. Monika Koul	Refresher Course	07.07.2014	CPDHE, University of Delhi
Zoology	Dr. Dinesh Kumar Gautam	UGC Sponsored Refresher Course in Life Sciences	12.08.2014	CPDHE, University of Delhi
Physics	Dr. Namrata Soni	Refresher Course	22.09.2014	Jawaharlal Nehru University
Chemistry	Dr. Jyoti Singh	Orientation Programme	11.10.2014	Jawaharlal Nehru University
Sanskrit	Dr. Braham Prakash	Orientation Programme	11.10.2014	CPDHE, University of Delhi
Zoology	Dr. Dinesh Kumar Gautam	Refresher Course in Life Sciences	08.12.2014	CPDHE, University Of Delhi
Zoology	Dr. Vandana K. Singh	Refresher Course in Life Sciences	08.12.2014	CPDHE, University Of Delhi
Chemistry	Dr. Monica Dinodia	Orientation Programme - OR 75	10.05.2015	CPDHE, University of Delhi



Chemistry	Dr. Pratibha Tiwari	Orientation Programme - OR 75	10.05.2015	CPDHE, University of Delhi
Chemistry	Dr. Jyoti Singh	Refresher Course	26.06.2015	CPDHE, University of Delhi
Chemistry	Dr. Chetna Gupta	Refresher Course	26.06.2015	CPDHE, University of Delhi
Chemistry	Dr. Ambika	Refresher Course	26.06.2015	CPDHE, University Of Delhi
Chemistry	Dr. Pratibha Tiwari	Refresher Course	26.06.2015	CPDHE, University Of Delhi
Chemistry	Dr. Anjali Saxena	Refresher Course	26.06.2015	CPDHE, University Of Delhi
Economics	Ms Sucharita Khuntia	Refresher course in Economics	20.07.2015	Human Resource Development Centre – JNU
Chemistry	Dr. Taruna Singh	Orientation Programme	24.8.2015	Human Resource Development Centre – JNU
English	Mr.Himanshu Kumar	Orientation Programme	20.6.2015	CPDHE, University of Delhi

#### 2.4.4 What policies/systems are in place to recharge teachers? (e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other National institutions and specialized programmes industrial engagement etc.)

A number of facilities are provided to the faculties to support Teaching-Learning and research activities such as

- Providing study leaves for faculties engaged in active research.
- Relieving faculty members from duties to attend orientation and refresher programmes, workshops, seminars.
- The faculty members are provided grants by University of Delhi as well as funding agencies like UGC, DST, etc. to participate in National/ International Conferences. The college extends special support by giving Duty and Academic Leave wherever possible within university rules.
- Usage of college resources as and when applicable for pursuing major or minor research.
- Given the special needs of women colleagues in the nurturing of children, the college extends full support by providing prompt childcare leave (within the university's stipulations).
- Disbursement of registration fees in case a faculty member presents a paper in a national/international seminar or conference is done as a matter of course.
- The faculty members are permitted for the deputation leave if they get offer from other institutions as per University rules.
- Encouraging the faculty members to apply for major and minor research projects.
- Exemption of college duties while writing Ph.D. thesis.
- Non-academic support such as arranging medical support through NSS.
- Field trips are organized by various departmental societies.



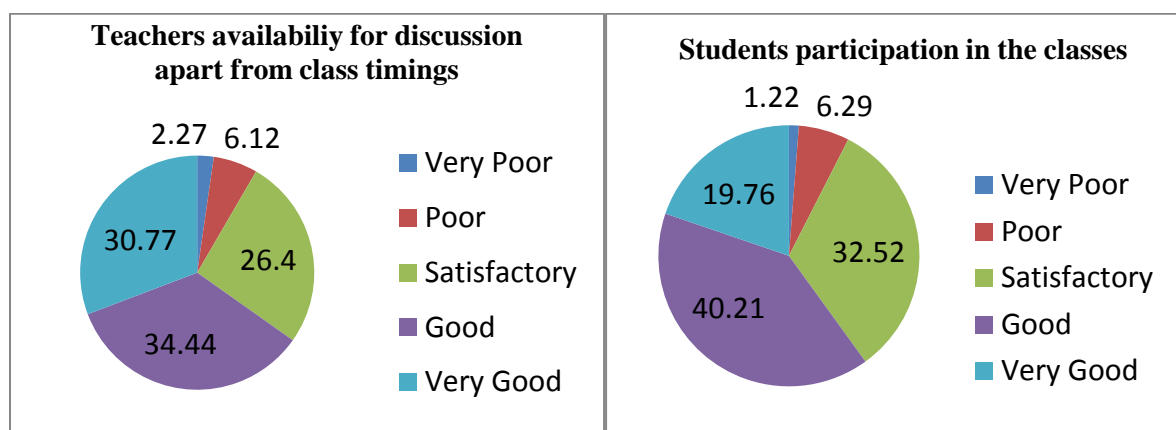
**2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

- During last 4 years, twenty four (24) faculty members were felicitated with various awards (Refer Table 3.19 for details).
- In addition Six teachers from Hansraj College were awarded Distinguished Teachers' Awards by Late Dr. A. P. J. Abdul Kalam, the former President of India. These awards were instituted by University of Delhi for excellence in undergraduate teaching (Refer Table 3.20 for details).
- The College since its inception has attracted and retained the best talents. This has helped create a conducive environment for the faculty members to further their interests in their respective fields leading to national and international recognition.

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the Teaching-Learning process?**

- The students are encouraged to give their critique regarding the quality of teaching, equipment in labs, infrastructure, classrooms etc. in the college necessary for effective learning.
- A 360 degree feedback process has been initiated in the college. Refer to the charts below:

*Fig 2.5: Student Feedback (Statistics in percentages)*



## 2.5 Evaluation Process and Reforms

**2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

Evaluation process is centralized in University of Delhi and all the colleges of University of Delhi are informed and updated about the process regularly. The procedure followed by the



university to communicate with its stakeholders is very transparent. Following measures are taken by Hansraj College to maintain transparency for its stakeholders.

- The Principal duly shares all relevant notifications from the university with the Teachers in charge of all Departments.
- Information regarding the internal assessment (IA) procedure is uploaded on both university and college websites. For further awareness, notices of the above are repeatedly put up on the Notice Boards of the college.
- The process of continuous internal assessment and final examinations are communicated to the students during the orientation session conducted at the beginning of the session.
- The marks obtained in the internal assessment are put on the college website as well as on the college notice board. Further each student signs an acceptance of his/her assessment before it is sent to the University. Grievances and doubts are addressed and sorted at multiple levels.
- If any discrepancy is found in, the internal assessment after it has been sent to the University, the concerned teacher sorts the matter with the University.

### **2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

The academic format of the course has changed from annual to semester. However from the current year Choice Based Credit System (CBCS) has been introduced. Accordingly, the examination format has also changed. Being an affiliated institution, the college adopts evaluation guidelines of the University of Delhi. Some finer points are mentioned below:

- Internal Assessment
- Centralized Evaluation

#### **College initiated reforms:**

To ensure that the students get involved and benefit from the teaching process, college teachers take multiple tests and assignments and use innovative methods including presentations and performances for evaluation.

For science courses, mock practical exams are conducted by the college teachers to give students an opportunity to know the area where improvement is required. The later can be worked upon to enhance the performance in actual exams. This exam also helps teachers to be fairer in the evaluation of practicals.

### **2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

- The institution strictly follows evaluation guidelines of University of Delhi. The college follows a process of continuous internal assessment followed by main examination.
- To ensure an effective implementation of internal assessment, faculty members are provided with the necessary guidelines at the beginning of the academic session.



- Teachers have constant discussions with the Principal to discuss concerns and issues related to the evaluation process and practices of internal assessment.
- All the departments of the college adopt a uniform policy of evaluation to present the progress of the respective class.
- Students are repeatedly informed about the processes of internal assessment. They are encouraged to discuss, revise and finalize their work before submission and evaluation.

### **2.5.4 Provide details on the formative and summative evaluation approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

Formative assessment of students is grounded on the regularity, attentiveness and steady work. Students are motivated to develop their thinking and improve their skills by various methods adopted by different departments for assessment. Some of them are listed below:

- Projects,
- Group discussions,
- Report writings,
- Talks,
- Power Point Presentations,
- Objective tests,
- Open book tests,
- Debating/looking at the problem from different viewpoints,
- Performances.

This also helps teacher to identify the areas of weakness as well as strength of the students. The weaker areas are then worked upon to improve overall performance.

The final examination is conducted and evaluated at the end of the term to focus on summative evaluation of students, externally by the university.

### **2.5.5 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

In Hansraj College, the classroom with students and teachers constitutes a proximal zone of development and the belief is that we all learn and grow together. The interactive areas between teachers and students and among students themselves are sacrosanct zones and encouraged to the maximum. The progressive performance of students is manifest in these interactions and it is monitored through a series of continual processes of internal assessments and of course, the yearly final examinations. Specific strategies (like focus on small group interaction, group discussions, power point presentations, specialized resource persons are invited to give lectures and share their expertise and skills with the students, etc.) are followed by all departments. Continual evaluation helps the students to work upon their weak points and improve their performance.





The pass percentage of students of each course is tabulated and analyzed at Section 5.2.2.

### **2.5.6 Details on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioural aspects, independent learning, communication skills etc.)**

All the students are made aware of the internal assessment evaluation criteria in the beginning of the academic session. The breakup of the internal assessment made available to each student.

- Internal assessment does not have weightage for behavioral aspects as per University guidelines.
- Independent learning and communication skills are given some weightage with the prior knowledge of the students.
- Internal assessment marks (that has attendance as one of its component) are uploaded on the College website.
- The students can check their marks and approach the concerned teacher directly in case of any clarification or discrepancy.
- A uniform criteria for internal assessment at the department level is followed by the faculty to boost transparency and rigor. Verbal feedback is often obtained internally to work towards improving the quality of internal assessment.
- However, needless to say, rigor and transparency are fostered by inculcating trust and mutual confidence between the principle shareholders, students and teachers.

### **2.5.7 Do the institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning? If yes, provide details on the process and cite a few examples**

Continuous internal assessments and the final exam are integral in the evaluation of students' performance. However, focusing on overall development and intent on creating better human beings for the future, other indicators and registers too are important. Participation of students in various co-curricular and social ameliorative activities (which here have never been seen as extra or extension activities but as important as academics) plays an active role in the betterment of students' performance. They are far more in tune with their society and environment evolving as better human beings and performing better as academics too.

### **2.5.8 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and university level?**

In case, there is any dissatisfaction from the students' side regarding evaluation, they have the freedom to have a talk about it with the faculty. It can be even addressed to the Principal if required. Then action is taken and grievance is redressed as soon as possible.

- The answer scripts of Internal class tests/assignments/presentation reports are returned to the students after assessment and they can express their grievances if any.
- The final internal assessment (IA) is sent to the university only after each student has signed his/her Internal Assessment records.





- College reports the errors (if any) at the university level in IA marks to the university.
- Also the university has the provision of re-evaluation. And if the student applies for the same, the answer script is re-evaluated at the university level.

## **2.6 Student Performance and Learning Outcomes**

### **2.6.1 Does the college have clearly stated learning outcomes? If ‘yes’ give details on how the students and staff are made aware of these?**

- The college is affiliated to University of Delhi and follows its designed curriculum strictly. The learning outcomes of each course are inbuilt in the prescribed syllabi. For successful outcomes, the college updates its website regularly with notifications and important circulars/revisions sent by the University. The college website also displays important information for the students. These include
  - The academic year calendar for the students and the faculty members
  - Timetable for all the courses offered by the college
  - Assessment criteria for every course
  - Guidelines for examination forms and details of submission
  - Evaluation schedule
  - Attendance record of the student
- The faculty of the college strives hard to bring out the best cognitive development of the student. For this purpose,
  - An “Orientation Day”, is held at the beginning of the academic year. The students are made aware of the college structure and the guidelines for the entire year. The faculty interacts with the students and discusses their expectation from the respective course. The students are also made aware of the future prospects of the course in which they are enrolled.
  - The faculty members regularly counsel and guide students about career prospects.
  - The college has a placement cell, through which students get placed in good companies after their graduation.

At Hansraj we proceed with an understanding that learning is a complex, ideal process and goal at the same time. It is not synonymous with pedagogy or even education. The desire is to create human beings who contribute towards the social evolutionary. The college emphasizes a close interaction among the faculty and the students to make learning symbiotic and intuitive rather than pedagogic.

### **2.6.2 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**

The learning outcomes of every course are clearly stated in the respective syllabus. These outcomes play a crucial role in determining and planning the teaching, learning and assessment strategies. For a transparent and effective system,



- Work load of each department of the college is calculated as per the UGC guidelines. As soon as an appropriate authority approves the work load, then, the process of time table gets started. If there is a need for ad-hoc/guest teachers, then, necessary steps are taken well in advance, so that teaching is not affected, once the semester starts.
- Timetables of each course are prepared well in advance before the semester starts. These time tables are uploaded on the college websites, as well as, displayed outside each class room.
- Monthly attendance of the students is uploaded on the college website, so that if there is any discrepancy, then the students can contact the respective dealing person and get it rectified.
- Faculty members are actively engaged in continuous internal assessment of the students. If a student shows unsatisfactory performance, then remedial classes are held and simplified study material is provided by the teacher.

### **2.6.3 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality jobs, entrepreneurship, innovation and research aptitude) of the courses offered?**

The institution has several wings to look after the holistic development of the students and to enhance the social and economic relevance of the courses offered. Through a sincere effort of the team, students are enabled to find meaning, and purpose in life through connections to the community, and to the humanitarian values. Some of the important wings of the institution are,

- The **National Service Scheme (NSS)** unit of Hansraj College. It works under the Ministry of Youth Affairs and Sports, Government of India, with the sole aim to inculcate the spirit of service among college students, to help individuals, groups and communities cope up with their problems. The objectives of NSS, Hansraj are:
  - To foster a culture of ‘Service before Self’.
  - To promote education among the underprivileged children.
  - To organize and sensitize the rural communities on various social issues.
  - To propagate the idea of a ‘Clean and Green’ surroundings.
  - To spread the need to maintain personal hygiene and good health.

NSS is the largest society of the college and has four important sub-units, to promote welfare and development in a plethora of fields, namely:

- **PADHAKU (Education)**
  - “Padhaku” organized an interactive session for its students to help them differentiate between good touch and bad touch. It helped students to identify sexual harassment and also gave them the courage to fight it.
- **Health**
  - Seminars of cancer awareness and organ donation are held.
  - Periodic health checkups for students and faculty members are organized.
  - Blood donation camps are organized.
- **Rural Development**
  - Visits to slum area (like those of Mayur Vihar) are organized.



- The Rural Development wing organized a Donation camp. The students donated clothes, shoes, toys and stationery for the needy.
  - Environment and Disaster Management.
    - Cleanliness drives are organized.
- **Placement Cell:** Placement of students is a top priority at Hansraj College. The placement cell is committed to provide a successful future and better placement opportunity for the students. It ensures that the students get the best jobs available in the corporate world. The placement cell coordinates the placement activities of the college and also acts as a liaison between the companies, Organizations and the students. The placement cell organizes orientation program for all those who are interested in sitting for placements. Various points such as recruitment procedures, placement policies, rules and regulations are discussed.
- **Innovation Projects:** The college faculty members have obtained several (last year, 10 projects were sanctioned) innovation projects from University of Delhi. These are inter-disciplinary projects and each project involves 3 faculty members and 10 students. The main aim of these projects is to bring about the research aptitude of the students, with a predominant stress on the application of the project theme.
- **Seminars/Workshops/Conferences/Visits:** Students are encouraged to attend and participate in seminars and workshops and conferences, organized at the college as well as at other premier institutions. Students are also encouraged towards short term internships, in order to give them exposure about an industrial environment. Industrial visits are also organized for the students.

### 2.6.4 How does the institution collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning?

Over the past few years, several changes have been made in the evaluation process of the students. At first it was an annual mode, which was replaced by the semester system, which was followed by FYUP mode, and then again semester system. The institution follows the process and guidelines marked by University of Delhi. In the current batches, the evaluation process has dedicated 25 % of the total assessment marks to the internal continuous evaluation of the student. These 25 % marks include, attendance, test results and presentation/assignments. The students are regularly monitored and their attendance and internal assessment marks are uploaded on college websites. If students have any discrepancy, then efforts are made to resolve it. If a student has not been attending classes, then he/she is made to fill an undertaking that he will overcome the shortage of attendance in the next semester. The results are shared with departments. In the Staff Council necessary action/amendments are made.

### 2.6.5 How does the institution monitor and ensure the achievement of learning outcomes?

The institution pays special attention to the fact that,

- Timetables of each course are made well in advance, before the semester starts



- The work-load is appropriately calculated and ad-hoc/guest teachers are appointed well in time.
- Continuous internal assessment is made by every department.
- Slow learners are identified and additional classes are conducted for them
- Advanced learners are made to participate in inter-disciplinary innovation projects
- Students are taken for industrial visits
- Students have well equipped laboratories, a huge library with an excellent collection of books, a big computing facility and Wi-Fi connection.

### **2.6.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?**

The college is affiliated to University of Delhi and as such, has no authority to determine the graduate attributes by itself. However, at the college level, through various activities (as described above) the teaching faculty ensures that,

- The student scores optimum marks for attaining graduate attributes as laid down in the University's guidelines. The faculty members are actively engaged in continuous internal assessment of the students. If a student shows unsatisfactory performance, then remedial classes are held and simplified study material is provided by the teacher.
- The students are groomed into responsible citizens through various wings, such as, NSS.
- The placement cell ensures that relatively good students are employable after graduation. It also brings about a leadership quality in the students.
- The faculty members try to inculcate a sense of application and problem solving skills in their students, so that they can face and resolve any challenges. The students are motivated towards communication skills, motivational skills and team work.
- The strength of a college is ultimately in the equation between the teachers and students and the sense of camaraderie among the students. Hansraj College seeks to wean its students away from a mere competitive spirit, and inculcates the spirit of co-operation.



## **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

### **3.1 Promotion of Research**

#### **3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

Hansraj College understands the pivotal role of research to improve educational standards and the quality of teaching. Keeping this in mind, the research committee of the college has recommended the setting up of two research centers, where faculty and students can carry out subject-specific and interdisciplinary research. Besides, each science department has a research laboratory to cater to the infrastructural needs. The recommended centers are:

1. Mahatma Hansraj Research Center (MHRC) in Life Sciences to cater to the research requirements and to house various research and innovation projects sanctioned to departments of Botany, Zoology and Chemistry.
  2. Mahatma Hansraj Research Center (MHRC) in Linguistics for the departments of English, Hindi and Sanskrit to provide a language laboratory which is well equipped with language related fonts and software, translation and transliteration facilities.
  3. VVRI Centre: Standing by the doctrine of Mahatma Hansraj and DAV philosophy, the college has an established *Vishva Bandhu* Centre of Indian Culture (Delhi Unit), that is affiliated to *Vishveshvaranand Vedic Research Institute* (VVRI), Hoshiarpur, Punjab. The VVRI center has pioneered the preparation of a Vedic Lexicon and brought out the alphabetical indices to the Padapathas of *Rigveda*, *Yajurveda*, *Samveda* and *Atharvaveda*. The VVRI center now works in alliance with the research department of D.A.V. College Management for the collection, preservation and publication of ancient texts.
- The Hansraj unit of the center houses around five thousand books in Sanskrit/Urdu/English related to Vedas and Upanishads.
  - To inculcate Vedic culture, a monthly *havan* is organized in the VVRI center on the 1<sup>st</sup> Tuesday of every month that is attended by the chairman, the governing body, the principal, the teaching and the non-teaching staff and the students.
  - To inculcate a healthy lifestyle, a yoga instructor from Morarji Desai National Institute of Yoga, New Delhi conducts two batches (separately for men and women) of an hour long yoga session every day in the VVRI center for the teaching and non-teaching staff and the students.

#### **3.1.2 Does the Institution have a research committee to monitor and Address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

The college has three committees to cater to the research-needs of the college:

**1. The Academic Affairs Committee:**

This committee, constituted by the Staff Council of the college, has 8 faculty members from different departments and the bursar as the members. The committee is responsible for:

- Allotment of funds to various departmental committees to conduct academic activities like seminars, workshops and departmental annual festivals.
- Making recommendations to the concerned department/committee/authority of college regarding infrastructural improvements, which are needed to improve the academic activities in the college. Such recommendations are based on regular feedback received from the departmental in charges
- Conducting/helping departments conduct college level seminars/colloquia of interdisciplinary nature, which may benefit more than one department.

**2. The Library Committee**

A staff council elected library committee consisting of a convener and members from various disciplines looks after the subscription of books, periodicals and journals, and caters to the specific research requirements of faculty and the departments. Hansraj houses one of the largest libraries in the North Campus, where a separate section is devoted to each subject. The library is connected to the central library of University of Delhi for all the e-journals. In addition, all the science departments house rich departmental libraries to cater to subject specific needs. The details on our library can be accessed in Section 4.2.

**3. The Research Committee**

The college has an operational Research Committee that is headed by the Chairman of the Governing Body of the college. The Principal is the convener of this committee. Besides, the committee has 13 more members one from each discipline. The committee is responsible for Dr. awing the layout for setting up of two centres of research namely Mahatma Hansraj Centre of Research (MHRC) in Life Sciences and Linguistics. The committee also deliberated on the need to set up a similar research centre for physical sciences in the college soon. The agenda of the committee is to foster interdisciplinary research to link the various disciplines.

- The Committee has recommended the college to approach UGC, DST and other funding agencies for recognition of the research centers and financial support and creation of a central instrumentation facility.
- The Committee also recommended the implementation of ethics related to usage of living organisms in research as per the guidelines. A Dissection Monitoring Committee (DMC) has already been constituted as per the UGC guidelines.
- An Institutional Bio-safety Committee have also been constituted as per the DBT guidelines.

**3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?**

Hansraj College encourages its faculty and students to conduct active research and supports research in the following ways:

- Notices regarding the availability of research and other grants from various funding agencies and the upcoming conferences and workshops are displayed on the notice board in various departments and the staff room from time to time.





- The faculty is encouraged to apply for various research schemes offered by various funding agencies. Several faculty members have obtained funds from UGC, DST-SERB, DBT, NMPB and other funding agencies (details provided in Section 3.1.5) for research. Once the funds have been sanctioned, complete autonomy is provided to the principal investigators and co-investigators. Section 3.1.5 provides details of faculty involved in active research.
- The institution takes care of providing infrastructural support like laboratory space, reading rooms, library facility, and computers with WiFi facility in the staff rooms and the laboratories for continuous pursuit of research activities by the faculty.
- Timely availability of resources is ensured by the institution, as and when required.
- The faculty is encouraged to carry out research and is allowed provisions like paid leave, study leaves etc. as per the DU guidelines. The following faculty members have availed the study leave.

**Table 3.1: Faculty members who have availed leave for Higher Education during the last 4 years**

S. N.	Faculty	Sponsor	Course	University	Year	Duration
1.	Ms. Madhvi Moni	DU Faculty Development Scholarship	M.Sc. (Economics & Econometrics)	University of Nottingham	2012	1 Year
2.	Mr. Animesh Naskar	-do-	M.Sc. (Economics & Financial Economics)	University of Nottingham	2012	1 Year
3	Dr. Ishwar Singh	UGC	Raman Fellowship	Department of Plant Pathology and Microbiology Iowa State University, Iowa USA	2014	6 months
4.	Ms. Kapila Mallah	-do-	M.Sc.(Economics & Econometrics) Pursuing	University of Nottingham	2015	1 Year
5.	Ms. Sneha Suri	-do-	M.Sc. (Economics) Pursuing	University of Nottingham	2015	1 Year
6.	Ms. Kriti Wadhwa	-do-	M.Sc. Mathematics (Pursuing)	University of Nottingham	2015	1 Year
7.	Ms. Beauty Das	-do-	M.Sc. (Investment) Pursuing	University of Birmingham	2015	1 Year
8.	Dr. Vandana Kumari Singh	-do-	M.Sc. (Biomedical Science & Molecular Research) Pursuing	Kings College, London	2015	1 Year
9.	Mr. Justin Mathew		Erasmus Mundus Scholarship for Ph.D. at Centre for Modern Indian Studies (CeMIS)	University of Gottingen, Berlin	2014	





10.	Ms. Maitri Baruah		Charles Wallace Short Term Research Fellowship		2013	
11.	Ms. Nabanita Chakraborty		Charles Wallace Short Term Research Fellowship		2014	
12.	Dr. Amit Sehgal	Institute of Life Long Learning, Univ. of Delhi	Deputation Fellow	Institute of Life Long Learning, Univ. of Delhi	2010	1 Year
13.	Shailu Singh		Ph.D	Delhi School of Economics, University of Delhi	2011	
14.	Hema Kapur		Ph.D	Delhi School of Economics, University of Delhi	2015	
15.	Sonam		Ph.D	Delhi School of Economics, University of Delhi	2014	
16.	Dr. Pradeep Kumar		Ph. D.		2011-2014	

- The institution library is one of the largest in the university and is connected to University of Delhi online library which has access to e-journals and resources which are useful for learning and research work. Besides the central library, each science department has its own departmental library. The departmental libraries are well-stocked and contain the latest editions of books which are relevant for the curriculum, for other research interests, and for MSc. Entrance examinations.
- Each Science department besides many laboratories, houses a research laboratory. Through various research schemes, the science departments have acquired many modern instruments like PCR thermocycler, UV-Visible spectrophotometer, advanced visible and fluorescence microscopes with documentation facility, High speed refrigerated centrifuges, -20 °C deep freezers, circulating hot/cold water baths, Ice flake machine, orbital shaker, spectrophotometer, refrigerator, polarimeter, colorimeter, de-ionized water units and other instruments for carrying out quality modern research.
- The college facilitates the timely auditing and submission of the utilization certificates.

### 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Since students and the faculty are the two important stakeholders in all the academic pursuits of the college, both are encouraged to actively participate in various academic and research



activities conducted in the college and beyond. Efforts are undertaken to sharpen the scientific aptitude and the research acumen of the students by

- Encouraging them to attend seminars/lectures conducted regularly in the college as well as outside. Well-known scientists of national and international repute are invited to deliberate on scientific and social issues (detailed in Section 3.1.6). Regular workshops and conferences are also conducted on frontier areas of academics and research in sciences, arts and commerce streams (detailed in Section 3.1.6). Active participation of all the various faculties and students ensures better understanding of the concepts and also helps to build active research interests.
- Research methodology workshops are conducted to orient students towards research. The details of various workshops conducted by various departments may please be seen under Section 3.1.6
- Field trips and visits to leading research organizations in and around the university are organized by various departments to develop research culture among students. Visits to research institutes like NIPGR, Plant Molecular Biology Department, South Campus, DU, Department of Biotechnology, IP University, and Department of Life Sciences, JNU, provide the students with live demonstrations of many concepts that are taught to them theoretically. Likewise, local and out station field excursions are a regular feature in the curriculum for students of Botany, Zoology and Life Sciences, and prove immensely useful to study the flora and fauna in nature. Every year, History Department organizes Heritage walks, visit to museums and archives to sensitize the students towards the importance of preservation of our cultural heritage.
- Short-term subject related research projects related to and beyond the curriculum are conducted to enhance the analytical temper of the students. For instance, Botany department conducts short term projects in Plant Physiology & Environment Management every year.
- The Physics and Electronics department arranges for short-term/ summer training programmes for their students. The programmes are primarily towards Industrial exposure or hands-on at Government Research Laboratories/ Centres to bridge gap between theory, in-house experimentation and real world.
- Debates/Quizzes/Panel discussions are conducted on relevant topics and fora in sciences, commerce, and humanities departments routinely, every year from time to time.

Important films and/or documentaries associated with scientific discoveries, Indian and non-Indian History, prescribed by the university and otherwise are also screened for the students time-to-time. For instance, the Environmental Society of the college showcased films like Darwin, the climate change, Ozone, Rain Catcher. A documentary made under innovation project HR 203 (2013-15) entitled "Comprehension of ethnic practices of selected Indian tribes as pro-ecological customs and their deviation from the stream" has been showcased for the students. Department of History organized screening of Last Emperor- a Hollywood movie based on the life of Puyi, the last emperor of China and Unbroken, based on world war second and Abraham Lincoln. Movies and documentaries screened by English department from 2011 onwards include Modern Times, Pulp Fiction, The Great Dictator, The Caucasian Chalk Circle, Pride and Prejudice (BBC), Blue is the Warmest Colour, Children of Heaven, The Greeks, Deep Sea and many more



### 3.1.5 Give details of the faculty involvement in active research (guiding research, leading research projects, engaged in individual/collaborative research activity, etc.)

The following member of the faculty worked as Supervisor/ Co-supervisor of Ph.D. Candidates:

**Table 3.2: Details of M.Phil/Ph.D supervision by the faculty members during the last four years**

Sl.No.	Teacher's Name	Department	Ph.D	M.Phil
1	Dr.Harmeet Kaur	Computer Science	3	-
2	Dr.Preeti Dharmarha	Mathematics	-	1
3	Dr.Mukund Madhav Mishra	Mathematics	2*	1*
4	Dr.Arvind	Mathematics	1*	-
5	Dr.Rama	Hindi	5	-
6	Dr. Sudhanshu K.Shukla	Hindi	1	-
7	Dr. Sandhya Rathore	Sanskrit	1+4*	4
8	Dr. Ranjit Kumar Mishra	Sanskrit	3*	2
9	Dr. Vijay Rani Rajpal	Botany	1*	-

*\*ongoing Ph.D/M.Phil*

**Fig 3.1: Number of M.Phil/Ph.D supervised by the faculty members during last four years**

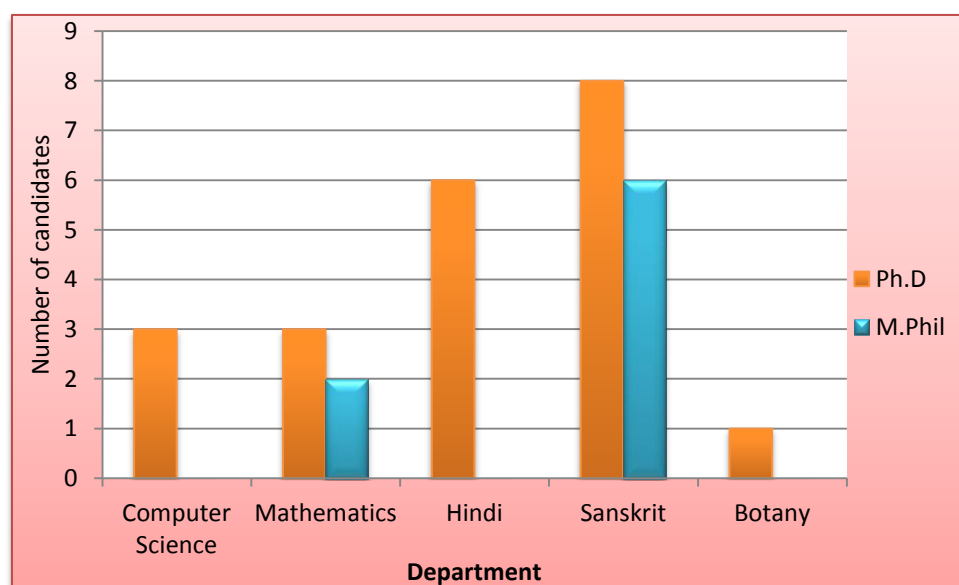




Table 3.3: Details of Major/Minor Research Projects sanctioned during the last four years

Faculty Members	Year	Funding agency Grant received	Title of the Project	Nature of the Project
Dr. Archana Singh	2013-16	DST-SERB Rs. 18.25 lakhs	"Cloning and functional characterization of Helicoverpa –inducible Hevein-like-protein from chickpea"	Fasttrack by DST, Govt. of India
Dr. Manjit Saggi	2013-16	UGC Rs. 7.0 lakhs	XBRL-based Corporate Disclosure Practices in India- Opportunities and Challenges	Major Research Project
Dr. T. ShiMr.ah	2013-15	DST-SERB Rs. 12.0 lakhs	"Land use change and soil organic carbon stock in ecologically strategic upland village agro-ecosystems in north east India: A case study in Shirui National Park"	Empowerment and Equity Opportunities for Excellence in Science 2013
Dr. Anand Sonkar	2013-15	DST-SERB Rs. 12.0 lakhs	"Taxonomic and Phylogenetic studies on the genus <i>Heracleum</i> L. in India"	Empowerment and Equity Opportunities for Excellence in Science 2013
Dr. Vijay R Rajpal	2014-17	National Medicinal Plant Board Rs. 24.0 lakhs	Autotetraploid induction, Ensuing Heteroploid Hybridization and Associated Rapid DNA changes as a possible Means of Genetic improvement of the Diploid <i>Tinospora cordifolia</i> and <i>Pluchea lanceolata</i> ".	Major Research Project
Dr. Monika Koul	2015 onwards	UGC- MHRD Rs. 9.81 lakhs	Evaluation and analysis of four medicinal plants for their pollution load in wild, cultivated and controlled conditions and response of their bioactive constituents in terms of yield and quality	Major Research Project
Ms. Alka Kacker	2011	Cine Music Director's Association Rs. 18.0 lakhs	"Effect of proposed amendments to Copyright Act on the Indian Music Industry". The report was submitted to the standing committee of the Parliament that has been constituted to look into the amendments. The research looked at the economic effect of changes in artists and performer's rights as proposed in the amendments.	Major Research Project



Table 3.4: The details of the Innovation Projects sanctioned in the college during the last four years

Faculty Members	Year-Duration	Funding agency & Grant received	Title of the Project	Departments Involved
Dr. Rama Dr. Satessh Kumar Mishra Dr. Vijay K Mishra	2012-13	DU HRC-101 Rs. 10 lakhs	<i>Rashtriya rajdhani kshetra me dristi badhito se sambandhit sansthaon ewam sansthanon ki uplabdhiyan ewam chunautiyan.</i>	Hindi & Sanskrit
Dr. Vijay Rani Rajpal Dr. Manju Mathur Dr. Neelam Gandhi	2013-15	DU HRC-201 Rs. 6 Lakhs	Pla Plant Invasions: Exploring the Ploidy Connection	Botany & Zoology
Dr. Shampa Bhattacharyya Dr. Renu Parashar Dr. Hema Chutani	2013-15	DU HRC 202 Rs. 6.5 Lakhs	Isolation and characterization of protein component of milk from different sources	Chemistry & Physics
Dr. Lokesh Chandra Mishra Dr. Vandana K. Singh Dr. Archana Singh	2013-15	DU HRC 203 Rs. 3.5 Lakhs	Comprehension of ethnic practices of selected Indian tribes as pro-ecological customs and their deviation from the stream	Zoology&Botany
Dr. Sushma Rani Ms. Preetinder Kaur Ms. SiMr.an Sethi	2013-15	DU HRC-204 Rs. 3.5 Lakhs	Public private puzzle in education: Where the parents want to send their children and why?	Commerce & Economics
Dr. Dinesh K Gautam Mr. Satish Chand Dr. Ambika	2013-15	DU HRC-205 Rs. 6.5 Lakhs	Developing a synthetic molecule imitating the properties of hemoglobin to reduce carbon monoxide emission from automobile exhaust	Zoology & Chemistry
Sh. P.K. Singh Dr. Namrata Soni Dr. Sukhbinder S. Rait	2013-15	DU HRC-206 Rs. 7.0 Lakhs	Development of an Eco-friendly, Efficient, Portable Lighting Source Utilizing a Renewable Energy Source and a Solid State Lighting Solution- Solar LED Bulb	Physics & Electronics
Dr. Amit Sehgal Sh. Sushil Kumar Dr. Rajan Walia	2013-15	DU HRC-207 Rs. 3.5 Lakhs	Designing and Optimization of Auto-Tracking Solar energy based Energy Conversion Module for Rechargeable Appliances	Electronics & Physics
Ms. Sonal Gupta, Dr. Krishan Sachdeva Mr. Rama Shankar Kushwaha	2013-15	DU HRC-208 Rs. 3.0 Lakhs	<i>Mithaas</i> , with <i>Enactus</i> .	Commerce & Hindi
Dr. Chetana Jain Dr. Arvind Dr. Tanuj Dhawan	2013-15	DU HRC-209 Rs. 3.5 Lakhs	Understanding the physical and geometrical behaviour of differential equations and its applicability in real world	Physics and Mathematics



Dr. Manoj Kumar Dr. Anand Sonkar Dr. Aparna Garg Dr. Amar Kumar	2013-15	DU HRC-210 Rs. 6.0 Lakhs	Development of Zero Discharge, Eco-friendly, Affordable and Carbon Neutral Bio-Fuel using in house Horticultural Waste	Chemistry, Physics, Mathematics and Botany
Mr. Sushil Kumar Dr. Pradeep Kumar Dr. Mona Bhatnagar Dr. Bijendra Singh	2015-16	DU HRC 301 Rs. 5 lakhs	"Masses of charmonium states in isospin asymmetric strange hadronic matter and their implications in heavy ion collision experiments"	Physics, Electronics & Chemistry
Dr. Romila R. Bisht Dr. V.S. Sajwan Dr. Shivani Agarwal Dr. Shalini K. Love	2015-16	DU HRC 302 Rs. 3.5 lakhs	"Development of mobile based application for the real time localization and identification of selected flora in University of Delhi"	Botany & Physics
Dr. Ambika Dr. Anjali Saxena Dr. Vijay Rani Rajpal	2015-16	DU HRC 303 Rs. 3.5 lakhs	"The extraction and utilization of natural pigments in cosmetics"	Chemistry & Botany
Dr. Arvind Mr. Brij Mohan Ms. Aditi Mittal	2015-16	DU HRC 304 Rs. 5 lakhs	"Study and security analysis of smart cards"	Mathematics & Computer Science
Dr. Kaveri Chakrabarty Dr. Dinesh K Gautam Dr. Satyakam Guha	2015-16	DU HRC 305 Rs. 5 lakhs	"Nutritional profiling and its correlation with functional respiratory capacity in soldiers/volunteers"	Zoology & Botany
Dr. Manoj Kumar Dr. Anand Sonkar Dr. Amit Rawat Dr. Amar Kumar	2015-16	DU HRC 306 Rs. 5 lakhs	"Utilization of Delhi Garden waste for renewable and sustainable energy production"	Chemistry & Botany
Dr. Harmeet Kaur Dr. Baljeet Kaur Mr. Dibyajyoti Das	2015-16	DU HRC 307 Rs. 7.5 lakhs	"Device for Uniquely abled (DUA)"	Computer Science & Physics
Dr. Shweta Rastogi Dr. Brijesh Rathi Dr. Himanshu Dr. Pooja Arora	2015-16	DU HRC 308 Rs. 5 lakhs	"Engineered biocompatible organic nanoarchitectures: A new paradigm for disinfections"	Chemistry & Zoology
Dr. Pratibha Tewari Dr. Maya Verma Dr. Hema Chutani	2015-16	DU HRC 309 Rs. 5 lakhs	"Development of visible light activated photocatalyst for water treatment"	Chemistry & Physics
Dr. Amit Sehgal Dr. Sukhbinder S. Rait Dr. Namrata Soni	2015-16	DU HRC 310 Rs. 5 lakhs	"Emergency management solutions: Design of solar based eco-friendly, efficient and portable lighting /Power water conditioning and thermo-electric solutions"	Electronics & Physics





Dr. Ishwar Singh Dr. Monika Kaul Dr. Avnish	2015-16	DU HRC 311 Rs. 4 lakhs	Study of germicidal properties of fumes generated in <i>havan (Yagya)</i> in order to assess potentiality of havan in curing some infections and air borne diseases	Botany & Sanskrit
Dr. Chetna Gupta Dr. Parul Pant Dr. Farhat Jahan	2015-16	DU HRC 312 Rs. 5 lakhs	“Synthesis of drug doped silica nanoparticles for bioimaging and therapeutic applications”	Chemistry & Zoology
Dr. Lokesh C. Mishra Dr. Archana Singh Dr. Jyoti Bhola	2015-16	DU HRC 313 Rs. 3.5 lakhs	“Critical and scientific analysis on use of alternative medicines with practical approach and case studies”	Zoology, Botany & Mathematics

### 3.1.6 Give details of the workshops/training programmes/sensitization programmes conducted/organized by the institution

Multiple seminars on upcoming and exciting themes are regularly conducted every semester, where eminent personalities deliberate on issues and interact with students and share their knowledge on modern aspects of research.

**Table 3.5: Eminent Personalities who visited Hansraj College during the last 4 years**

Name of the Eminent Personality Affiliation	Year
<b>BOTANY</b>	
Prof. J.P. Khurana, Department of Plant Molecular Biology, South Campus, University of Delhi, Delhi	2011
Prof. K.C. Bansal, Director, National Bureau of Plant Genetic Resources (NBPGR), New Delhi	2011
Dr. Subodh Sharma, Ministry of Environment and Forest, Govt Of India, New Delhi	2011
Prof. S.Natesh, Department of Biotechnology, Government of India, Delhi	2012
Prof V. JayaRam, Indian Institute of Technology, New Delhi	2012
Prof. A.K. Bhatnagar, Professor, Department of Botany, University of Delhi, Delhi	2012
Dr. Jeremy Simpson, Professor, Department of Cell and Molecular Biology, Ireland University, Ireland	2013
Dr. T Venketaswaran, Department of Science and Technology, Government of India, New Delhi	2013
Prof. Sudeshna Mazumdar, Professor, Department of Botany, University of Delhi, Delhi	2013
Prof. Arun Jaganath, Professor, Department of Botany, University of Delhi, Delhi	2013





Dr. Geetanjali Yadav, NIPGR, JNU, New Delhi	2014
Prof. Yogender Singh, IGIM, Mall Road, New Delhi	2014
Prof. Rupam Kapoor, Professor, Department of Botany, University of Delhi, Delhi	2014
Prof. Ashwini Pareek, Professor, School of Life Sciences, Jawahar Lal University, New Delhi	2015
<b>CHEMISTRY</b>	
Dr. V.K. Verma, Joint Director , Environment Protection division, Sri Ram Institute for Industrial Research, New Delhi	2011-12
Dr. Bhupesh Sharma, Scientist, Sri Ram Institute for Industrial Research, New Delhi	2011-12
Dr. Krishan Kumar, Associate Professor School of Environmental Sciences, JNU	2011-12
Prof. R.N. Mukherjee, Director, IISER, Kolkatta	2012-13
Prof. A.K.Ganguly, Director, Institute of Nanoscience and Technology, Mohali Punjab	2012-13
Prof. P.K. Roy, NBRC, Manesar, Haryana	2012-13
Prof. N.R. Jagannathan, Head, Department of NMR. and MR.I facility , AIIMS Delhi	2012-13
Dr. C.Sharma, Scientist NPL	2013-14
Sh. V. N . Sehgal. Ret. Director, IB, New Delhi	2013-14
Mr. S. C. Mathur, Chemical Examiner Central Revenue Control Laboratory, Pusa IARI	2013-14
Dr. S. C. Dutta, Retd. Associate Professor, Department of Chemistry, Hansraj College	2014-15
Shri S. K. Singla, Central Forensic Science Laboratory, CBI	2014-15
Dr. V. K. Verma, Joint Director (EPD), Shriram Institute for Industrial Research, New Delhi	2014-15
<b>COMMERCE</b>	
Mr. Sanjiv Dass Corporate Trainer, BSE institute Ltd.	2011-12
Mr. Amit Jugia Partner CJS Nanda Associates (also worked with PwC till 2001)	2011-12.
<b>ENGLISH</b>	
Prof. Ashish Nandy Mr.inal Miri Susie Tharu Supriya Choudhuri Tridip Suhrud	The English Department organized a three-day conference titled 'Constructions of the self: Theories, Contexts, Practices. It was funded by UGC, Sahitya Akademi and the Department of English, University of Delhi.
Aruni Kashyap	Invited by the department for a one day workshop on creative writing.
<b>ECONOMICS</b>	
Dr. Bina Agarwal Padamshri Director & Professor of Economics Institute of Economic Growth	2011



Ms. Vinita Deepak Head of the South Asia Operation of AP Television News.	2011
Dr. M. Narender General Manager Director of Indian Overseas Bank	2012-14
Prof. Aditya Bhattacharya Head of the Department Delhi School of Economics	2012-14
Prof. J. P. Sharma Head of the Department Department of Commerce Delhi School of Economics.	2012-14
Dr. Alok Pandey Director Ministry of Finance Govt. of India	2014-15
Prof. Jayati Ghosh CESP, JNU	2014-15
Dr. Poonam Gupta Senior Economist World Bank	2014-15
<b>HINDI</b>	
Om Thanawi Editor Dainik "Jansatta"	2012
Mr. Ravish Kumar, NDTV	2012
Dr. Kumud Sharma Dept. of Hindi, DU	2013
Dr. Mahendra S. Surya Kathkar	2015
Dr. Kamal K. Goynka Hindi Critic Writer	2015
Daya Prakash Sinha Ex. Administrator, Govt. of India	2015
Prof. Harimohan Sharma Dept. of Hindi, University of Delhi	2014
Mr. Kamal Kishor Goyanaka Kendriya Hindi Sansthan	2015
Ms. Anuradha Chaudhary News 24	2014
Mr. Mukesh Agrawal Scholar of Linguistic 201	2015
Mr. Sree Kiran Rijuju Min Home Affairs, Govt. of India	2014
Mr. Rakesh Bedi Actor	2014
Mr. Nitish Bharadwaj Actor	2014
Ms. Kashmeera Shah Actress	2014
Ms. Alka Sinha Writer	2014



Mr. Ramjilal Jangir <i>Bhartiya Jansanchar Sangh</i>	2013
Mr. Pradeep Mathur Media Expert	2015
Mr. Shesh Narayan Singh Sr. Journalist	2015
Mr. Ganga Prasad Vimal, Author	2014
Dr. Alpana Mishra Dept. of Hindi, University of Delhi	2013
Ms. Nidhi Kulshreshth NDTV	2014
Mr. Suman Kesari Poetess	2014
Mr. Arvind Gaur <i>Asmita</i> Theatre	2015
Mr. Vinod Bhardwaj Cinema Expert	2014
Dr. Satyaketu Sankrit Academician	2013
Mr. Sanjeev Jayaswal Actor	2013
Dr. Ramesh Gautam Dept. of Hindi, University of Delhi	2012
Prof. Namvar Singh <i>Alochak</i> – Author	2015
Prof. Gopeshwar Singh Hindi Dept. D.U.	2015
Mr. Ravikant Social Activist And Writer	2014
Dr. Devendra Chaubey J.N.U., New Delhi	2013
Mr. Rajendra Gautam Dept. of Hindi, University of Delhi	2013
HISTORY	
Dr. Amar Farooqui Professor, Department of History University of Delhi	2015
Dr. Raziuddin Aquil Department of History University of Delhi (2014)	2014
Dr. David. V. Zou Department of History, University of Delhi	2014
Dr. Madhu Kishwar Centre for the Study of Developing Studies Delhi	2013
Dr. Arvind Sinha, Professor Centre for Historical Studies (CHS) Jawaharlal University, New Delhi	2012
PHYSICS & ELECTRONICS	
Dr. Naveen Kumar Verma LASTEC, New Delhi	2013



Dr. Vinay Gupta Dept. of Physics University of Delhi	2013
Dr. Poornima Malhotra LASTEC, New Delhi	2013
Dr. P.K. Singh, National Physics Laboratories New Delhi	2014
Dr. P K Pandey Maharaja Agarsen College University of Delhi New Delhi	2014
Dr. Sobhan Sen School of Physical Sciences Jawaharlal Nehru University New Delhi	2014
Dr. Satyaki Bhattacharya Department of Physics and Astrophysics University of Delhi Delhi	2012
Mr. Janesh Kaushik Solid State Physics Laboratory DRDO, Ministry of Defence Government of India Delhi	2012
MATHEMATICS	
Dr. Shanta Laishram Indian Statistical Institute, Delhi	2011-12
Prof Gadadhar Mishra IISc Bangalore	2012-13
Prof Manindra Agrawal IIT Kanpur	2012-13
Prof Alok Dey Indian Statistical Institute, Delhi	2012-13
Prof Kapil H Paranjape IISER Mohali	2012-13
Prof. Amber Habib Shiva Nadar University, Noida	2012-13
Prof. Sudeshna Basu George Washington University, Washington DC	2013-14
Prof. Kalyan B. Sinha Jawahar Lal Nehru Centre of Advanced Sciences, Bangalore	2013-14
Dr. Shobha Bagai Cluster Innovation Centre, University of Delhi	2014-15
PHILOSOPHY	
Prof. H.S. Prasad Department of Philosophy University of Delhi	2014
Prof. Bindu Puri Department of Philosophy University of Delhi	2014



SANSKRIT	
Prof. Shashi P. Kumar Special Centre for Sanskrit Studies JNU, Delhi	2012
Dr. Meera Dwivedi Associate Professor, Dept. of Sanskrit, D.U.	2013
Dr. Bhartendu Pandey Associate Professor, Dept. of Sanskrit, D.U.	2014
ZOOLOGY	
Prof. Rup Lal Department of Zoology University of Delhi	2014
Dr. Chandrima Saha Director, NII, New Delhi	2015
Prof. Umesh Rai Director South Campus Department of Zoology, University of Delhi	2015
Dr. Satyajeet Rath, Senior Scientist, NII	2014
Prof. Sanjay Jain	2015
Dr. Fayyaz Qudsar	2015

### **Conferences/ Workshops/ Seminars Organized:**

#### **BOTANY**

1. A lecture on Phytochromes: The recent facets of their working in plant systems was organized (2011)
2. Organized Seminar on Genetically Modified Foods: Debate still going on (2011)
3. Seminar on Climate Change: Where does India stand today (2011)
4. Organized a Seminar on Plants and human civilizations (2012)
5. Seminar on Bioinformatics and its applications (2012)
6. Department of Botany organized "Inspire Internship Programme-2012," at Hansraj College, University of Delhi with financial support from Department of Science and Technology, Govt. of India, from December 17-21<sup>st</sup>, 2012
7. Seminar on Pollination Biology: recent trends and insights (2012)
8. A lecture was organized in the Department on Cancer Biology (2013)
9. The Department of Botany organized a Seminar on Plant-Pathogen Interaction: Papaya Mosaic Virus (2013)
10. Seminar on Systems Biology: The Modern Perspectives (2013)
11. Seminar on Biology and Modern science: The relevance today (2013)
12. A National Conference on Relevance of Nanotechnology in Biology" on March 1<sup>st</sup>, 2013, held by Department of Botany and Zoology, Hansraj College, University of Delhi .
13. Organized a Seminar on Bio-informatics in plant reproduction (2014)
14. Organized a Seminar on Drug Discovery: Tuberculosis today (2014)
15. Under the Star College Programme, Department of Botany Conducted a Workshop on "Recent trends in Microbiology & Biotechnology" from 18-19<sup>th</sup> March, 2014, funded by DBT,



16. Seminar on Mycorrhizal Associations and their role in Plants (2014)
17. The department organized a Seminar on Molecular Aspects of Abiotic Stress (2015)

**CHEMISTRY**

18. One Day Seminar “Synthesis 2012” was organized in 2012
19. One Day National seminar “Chemistry in Interdisciplinary Applications” was organized in 2013.
20. Department of Chemistry has organized DBT sponsored workshop on” Relevance of Experimental Chemistry to Biotechnology”, Hansraj College University of Delhi, from March 12-13, 2014.
21. One Day Seminar “Frontiers of Chemistry” was organized in 2014
22. National Workshop on “Role of Scientific and Technical Terminology in Higher Education”, Organized by Department of Chemistry, Hansraj College University of Delhi, and Commission for Scientific and Technical Terminology, Ministry of Human resource and Development, Govt. of India, from July 23-24<sup>th</sup>, 2015.
23. Department of Chemistry has organized DBT sponsored workshop on” Application of Analytical Tools to Biochemistry”, organized by Department of Chemistry, Hansraj College University of Delhi, from July 15-17, 2015.

**COMMERCE**

24. Seminar on “An overview of Indian stock indices” by Mr. Sanjeev Dass, Corporate Trainer, BSE Institute Ltd. (2011-12)
25. Workshop conducted by CIMA (London) was organized for the teachers on “Case study method of teaching.”(2011-12)
26. A workshop for the teachers of the department was organized on Case Studies Method Teaching on 21<sup>st</sup> November 2011 by CIMA, London
27. A Seminar on “Social Entrepreneurship” on 1<sup>st</sup> March, 2012
28. A seminar on “An overview of Indian Stock Indices” on 24<sup>th</sup> January 2012
29. Organized monthly event, first being, “Corporate Suave” on 25<sup>th</sup> September 2012, secondly “Mock Stock” on 19<sup>th</sup> October 2012 and the “Smart PREP Session” on 5<sup>th</sup> November 2013 to help students overcome their fear of examination.(2012-13)
30. Seminar on “FDI in Retail” on 29<sup>th</sup> October 2012 by Mr.s. Archana Kapoor (Former CMD Tourism, Finance Corporation of India Ltd.) (2012-13)
31. Seminar on “Companies Bill 2012” by Professor J.P.Sharma (Head of Department of Commerce, Delhi School of Economics, University of Delhi) (2012-13)
32. Seminar on “Goods and Service Tax” on 21<sup>st</sup> January 2013 by Mr. Gautam Ray (Consultant to the Department of Revenue for the policy framework of GST in India) and Mr. JK Batra (Advisor Taxation Federation of Indian Chamber of Commerce and Industry)
33. Organized an event “The Biz Quiz Savant: A Business Quiz Like No Other”(2013-14)
34. Organized Seminar on “Leadership” by Prof. Jean Saldanha, Faculty IBS Gurgaon.(2013-14)
35. Organized Seminar on “Business Ethics, Corporate Responsibility and Organizational Transformation” by Prof. K.V. Bhanumurthy, Faculty, Department of Commerce, Delhi School Of Economics, University of Delhi. (2013-14)
36. Organized an informative Group Discussion and Question Answer Session in “Rupee in Crisis” on 28<sup>th</sup> October 2013.
37. Organized an online competition “StockMIND” from 13<sup>th</sup> Jan 2014 to 23<sup>rd</sup> Jan 2014.
38. Organized a Seminar on “StockMIND” on 5<sup>th</sup> March 2014.



39. Organized a Seminar on “Corporate Governance and Social Responsibility of Business” on 21<sup>st</sup> Feb 2014. Speaker was Prof. J.P. Sharma, Head, Department of Commerce, Delhi School of Economics, and University of Delhi.
40. Online inter-college competition named “The Wolf of Dalal Street” was organized from 15<sup>th</sup> March 2014 to 30<sup>th</sup> March 2014.
41. Seminar on “Investment Banking” was organized on 26th September 2014.
42. A “mock-stock” competition was organized for first year students on 3<sup>rd</sup> September 2014.
43. A Case-study competition “Solveritis’14” was conducted with the one-hour learning session which was organized before the event on 15<sup>th</sup> October 2014
44. A talk “Empresario” was conducted with the mentorship of EDC IITD on 5<sup>th</sup> November 2014 to create an eco-sphere of entrepreneurship.
45. Business quiz, case study competition, Mock Stock and Business games for the students
46. A seminar and online Mockstock competition “Stockmind” was organized in collaboration with ICICI Direct in January 2015.
47. A Seminar on “Group Discussions and Personal Interview” was organized in association with IMS in January 2015.

### **COMPUTER SCIENCE**

48. A four-day workshop on “Website Designing” on 23-25 and 28-29 of September 2015 for second and third year students of Department of Computer Science.

### **ENGLISH**

49. The English Department organized a three-day conference titled ‘Constructions of the self: Theories, Contexts, Practices. It was funded by UGC, Sahitya Akademi and the Department of English, University of Delhi
50. The department organized a workshop on gender and sexuality over two days with noted activist Ms. Pramada Menon. The event was well attended and provided a space for an engaging discussion on a plethora of issues (2012).
51. Aruni Kashyap was invited by the department for a day workshop on creative writing.(2014)

### **ECONOMICS**

52. As chairperson of the College Complaints Committee against Sexual Harassment Ms. Alka Kacker organized workshops and seminars on women related issues.
53. A detailed study conducted by Ms. Alka Kacker on the effect of proposed amendments to Copyright Act on the Indian Music Industry sponsored by Cine Music Directors’ Association in 2011.
54. Organized Workshop on Prevention of Sexual Harassment of women at workplace. 12<sup>th</sup> March 2012
55. Organized workshop on Pre- marital counseling in October 2012
56. Organized a talk on Gender Sensitivity in February 2014.

### **HINDI**

57. *Nagarjun Vividh Ayam* , U.G.C. - 2012
58. *Ramvilash Sharma Aur Vishnuprabhakar : Vividh Aayam* - 2013
59. *Sinema Aur Rangmanch Ke Sambandh* - 2013
60. *Hindi Katha Sahitya Evam Hindi Kavita* -2013
61. *Hindi Kavita Aur Hindi Kahani* – 2013





62. *Bhasha Ke Samajik Sandarbh* - 2013
63. *Social Media Bhartiya Jan Sanchar Sangh* - 2014
64. *Bhashayee Patrakarita, Bharteeya Jansanchar Sangh* -2014
65. *Gadya Lekhan Kala (Upanyas Ke Sandarbh Mein)* - 2014
66. *Bharteeya Bhasha Patrakarita Shikshan* - 2014
67. *Hindi Bhasha Aur Media* – 2014
68. *Vaishvikaran Ke Daur Mein Hindi* - 2015
69. *Paid News* -2015
70. *Patrakarita Shabdawali, Prayog Aur Samasyaern*, Cstt (Ministry of HRD) - 2015

### **MATHEMATICS**

71. Seminar on “Grimm Conjecture and Riemann Hypothesis” (2011)
72. Seminar on “From Zero to Infinity”(2012)
73. Organized two days’ “Science Academies’ Lecture Workshop” in August 2012 at the Hansraj College.
74. Seminar on “Mathematics and Politics” (2013)
75. Organized “National Conference on Advances in Mathematics” held at Hansraj College in March 2014
76. Seminar on “Symmetries in Mathematics”(2014)
77. Seminar on “Mathematical Modelling”(2015)

### **PHYSICS AND ELECTRONICS**

78. Organized talk on “Semiconductor Research and Development at Solid State Physics Laboratory” in Department of Physics and Electronics, Hansraj College in September 2012.
79. Organized talk on “Large HyDr.on Collider” at Department of Physics and Electronics, Hansraj College in September 2012.
80. Organized talk on “Nano scale Sensors for Bio-medical Applications” in Department of Physics and Electronics, Hansraj College in February, 2013.
81. Organized talk on “Solar energy research work at National Physical Laboratory” in Department of Physics and Electronics, Hansraj College in February, 2013.
82. Workshop on “Applications of Lasers in Biotechnology” in December 16-17, 2013.
83. Organized talk on “Fluorescence and Spectroscopy” in Department of Physics and Electronics, Hansraj College in September, 2014.
84. Organized talk on “Microcontrollers” in Department of Physics and Electronics, Hansraj College in September, 2014.
85. Organized talk on “Laser Applications in Medical Science” in Department of Physics and Electronics, Hansraj College in March, 2014.
86. Workshop on Functional Analysis and Troubleshooting of Electronic Devices for Biotechnology and Biomedical Applications in March 12-14, 2014.
87. National Workshop on “Fluorescence Studies of Organic Structures” held on September 26 – 27, 2014 at Department of Physics and Electronics, Hansraj College. (<http://www.people.du.ac.in/~asehgal/fsos/>)

### **ZOOLOGY**

88. A National Conference on Relevance of Nanotechnology in Biology” on March 1<sup>st</sup>, 2013, held by Department of Botany and Zoology, Hansraj College, University of Delhi.
89. “Molecular Biotechnology Techniques” organized by Department of Zoology, Hansraj College, University of Delhi under DBT Star College Scheme with Department of Biotechnology, Govt. Of India 21st-23rd March, 2014.



### 3.1.7 Provide details of prioritised research areas and the expertise available with the institution.

*Table 3.6: Areas of expertise of faculty members*

Name of Faculty	Area of Expertise
<b>BOTANY</b>	
Dr. V.S. Sajwan	Plant Anatomy and Plant pathology
Dr. Manju Mathur	Plant Pathology and Taxonomy
Dr. Vijay R Rajpal	Genetics and Molecular Biology
Dr. Anand Sonkar	Plant Systematics
Dr. Monika Koul	Ecology and Reproductive Biology
Dr. Ishwar Singh	Microbiology and Plant Pathology
Dr. T. Shimrah	Ecology
Dr. Archana Singh	Plant Molecular Biology
Dr. Mahaswetta Saikia	Cell and Molecular Biology
Dr. Romila R Bisht	Reproductive Biology
Dr. Satyakam Guha	Plant Tissue Culture
Dr. Shalini K Love	Ecology, Environmental Biology
Mohd. Hanief	Environmental Biology
<b>CHEMISTRY</b>	
Dr. Shashi Saxena	Inorganic chemistry
Dr. Ranjana Rastogi	Inorganic chemistry
Dr. Bijendra Singh	Inorganic chemistry
Dr. Shampa Bhattacharya	Quantum Chemistry
Dr. Renu Parashar	Quantum Chemistry
Dr. Satish Chand	Organic Chemistry
Dr. Anjali Saxena	Organic Chemistry
Dr. Chetna Gupta	Bioinorganic chemistry
Dr. Aparna Garg	Computational Chemistry
Dr. Pratibha Tiwari	Nanotechnology
Dr. Monika Dinodia	Organic Chemistry
Dr. Jyoti Singh	Computational Chemistry
Dr. Manoj Kumar	Organic Chemistry
Dr. Shailendra Singh	Electrochemistry
Dr. Himanshu	Medicinal Chemistry
Dr. Shweta Rastogi	Green Synthesis
Dr. Aparna Bansal	Bio-physical Chemistry
Dr. Parul Pant	Inorganic chemistry
Dr. Brajesh Rathee	Medicinal Chemistry and Nanotechnology
Dr. Ambika	Bio-Organic Medicinal chemistry
Dr. Taruna singh	Bioinorganic Chemistry
Dr. Amit Rawat	Organic Chemistry
Mr. Hari Mohan	Inorganic Chemistry
Mr. Surendra Kumar	Florescent Organic Chemistry
Ms. Nidhi Rawat	Physical Chemistry
<b>COMMERCE</b>	
Mr. Rakesh Agarwal	Law
Mr. N.K. Jain	Finance
Mr. Bharat Bhushan	Law & Accounts
Dr. Neera Chopra	Human Resource
Dr. Krishan Sachdeva	Taxation, International Business
Dr. Manjit Singh Saggi	Finance



Dr. Manisha Verma	Corporate Governance
Dr. Sonal Sharma	Finance
Mrs. Sonal Gupta	Organisational Behaviour & Marketing
Dr. Meghna Malhotra	Business Economics
Mrs. Preetinder Kaur	Account
Dr. Sushma Rani	Finance
Dr. Beauty Dash	Human Resource
Dr. Reetika Jain	Marketing & Accounts
Mrs. Sneha Suri	Finance
Mrs. Sudesh Kumari	Organisational Behaviour
Mrs. Ruchi	Finance
Ms. Anjali Tuli	Finance
Ms. Deepshikha Yadav	Law
Ms. Ritika Seth	Finance
Ms. Garima Jindal	Marketing & Human Resource
Ms. Shasta Gupta	Corporate Governance
Ms. Sonam Dutta	Marketing
Mr. Manas	Finance
Mr. Pardeep	Finance
<b>COMPUTER SCIENCE</b>	
Mr. Sanjay Batra	Database Systems
Dr. Harmeet Kaur	Recommender System
Dr. Baljeet Kaur	Machine Learning, Pattern Recognition
Dr. Manoj Agarwal	Machine Learning, Evolutionary Computation, Multi Objective Optimization
Ms. Sunita Chand	Cryptography
Ms. Alka Khurana	Programming
Ms. Aditi Mittal	Data Mining
Ms. Arti Goel	Programming
Dr. Manju Sradana	Machine Learning, Pattern Recognition
Ms. Bharti Rana	Machine Learning, Pattern Recognition, Image Processing
<b>ECONOMICS</b>	
Dr. S K Laroiya	Development Economics
Dr. Anil S Kokrady	Microeconomics
Dr. Anand Mittal	Monetary Economics and Finance
Ms. Alka Kacker	Public Finance & Macroeconomics
Ms. Anita Balani	Statistics & Microeconomics
Ms. Vandana Chaudhary	Macroeconomics
Mr. C. K. Nanda	Mathematical Economics & Economic History
Ms. Shailu Singh	Econometrics & Development Economics
Ms. Hema Kapur	Macroeconomics & Monetary Economics
Mr. Animesh Naskar	Financial Economics, Industrial Economics & Microeconomics
Ms. Anjali Khurana	Economic History & Indian Economics
Ms. Kapila Mallah	Development Economics & Gender Economics
Ms. K Sucharita Khuntia	Public Finance & Macroeconomics
Ms. Simran Sethi	International Economics & Macroeconomics
Ms. Sonam	Mathematical Economics & Development Economics
Ms. Madhavi Moni	Econometrics & Agricultural Economics
Mr. Jyoti Prakash Verma	Microeconomics
Ms. Venu Gupta	Microeconomics
Ms. Divisha Goyal	Macroeconomics



ENGLISH	
Dr. Nivedita Sen	Translation and Children's Literature
Dr. Sanjay Kumar	Activist theatre Drama and theories of drama Literary theory
Dr. Meenakshi Malhotra	19th Century Novel, Women's Writing and Life writing, Women's Studies
Dr. Nilofer Kaul	Psychoanalysis and Gender
Mr. Sanjiv Nandan Prasad	Pedagogy and Literary Theory
Mr. Mithuraaj Dhusiya	Film studies, Gender studies, Sexuality studies, Women's writing and Cultural studies
Ms. Prachee Dewri	Theatre and Performance studies
Ms. Sabitha T.P.	Company painting and Landscape art
Ms. Maitri Baruah	Sports and Literature, Performance Studies
Ms. Nabanita Charkraborty	Early Modern English studies, Modern literature, Political theory and Rhetoric
Ms. Arnab Dasgupta	Print cultures in Colonial Assam and Bengal The Novel in 19th Century India Cultures of the Visual
Ms. Priyanka Verma	Contemporary Literature, European Drama
Mr. Himanshu Kumar	Children's Literature Translation Studies
Mr. Vaibhav Iype Parel	Indology and Theology
Ms. Supurna Dasgupta	Translation and Subaltern Studies
Ms. Shivani Mutneja	Film Studies
Ms. Ruchi Sharma	Postcolonial theory and Gender studies
Ms. Mun Lun Kim	Theology and Gender studies
HINDI	
Dr. Rama	Media
Dr. Sudhanshu Kumar Shukla	<i>Natak Evam Kavyashatra</i>
Dr. Rajmohini Sagar	<i>Bhaktikal</i>
Dr. Neetu	<i>Natak</i>
Dr. Rajesh Kumar Sharma	<i>Aadhunik Hindi Sahitya</i>
Dr. Nrityagopal Sharma	<i>Madhyakal</i>
Dr. Prem Prakash Meena	Media (film, fashion, TV)
Dr. Vedprakash	<i>Madhyakal</i>
Dr. Ramashankar Kushwaha	<i>Aadhunika chintan aur sahitya (gadya)</i>
Dr. Vijay Kumar Mishra	Media <i>evam</i> Cinema
HISTORY	
Dr. Sharmila Shrivastava	Modern Indian History
Dr. Monmayee Basu	Modern Indian History
Mr. Yogendra Dayma	Ancient Indian History
Mr. Justin Mathew	Modern Indian History
Mr. Amit Kumar	Modern Indian History
Mr. Santosh Hasnu	Medieval Indian History
MATHEMATICS	
Dr. Neelam Malhotra	Optimization Technique
Dr. Preeti Dharmarha	Functional Analysis and Operator Theory
Dr. Harjeet Arora	Operations Research and Management Science
Dr. Deepa Thirwani	Real Analysis
Ms. Amita Agarwal	Real Analysis



Dr. Jyoti Bhola	Functional Analysis and Operator Theory
Mr. Rakesh Batra	Functional Analysis and Topology
Dr. Mukund Madhav Mishra	Harmonic Analysis
Dr. Arvind	Cryptography
Ms. Kirti Wadhawa	Optimization Techniques
<b>PHILOSOPHY</b>	
Dr. Bhanu Bhupendra Sharma	Ethics, Indian Philosophy. Philosophy of Bhagvat Gita
Dr. Aamir Riyaz	Philosophy of Religion, Logic, Contemporary Indian Philosophy (Gandhi, Ambedkar and Iqbal), Wittgenstein Philosophy
Dr. S.K. Srivastava	Philosophy
<b>PHYSICAL EDUCATION</b>	
Dr. M. P. Sharma	Physical Education
<b>PHYSICS &amp; ELECTRONICS</b>	
Dr. Mamta Saini	Optoelectronics
Mr. P. K. Singh	Semiconductor Physics
Dr. Mona Bhatnagar	Photovoltaics
Dr. Amit Sehgal	Microelectronics & VLSI
Mr. Sushil Kumar	Nuclear and Particle Physics
Dr. Pradeep Kumar	Thin Films & DFT Calculations
Dr. Namrata Soni	Condensed Matter Physics
Dr. Hema Chutani	Molecular Physics
Dr. Chetana Jain	Electronics & Astrophysics
Dr. Maya Verma	Material Sciences
Ms. Bhavna Vidhani	Theoretical Atomic and Molecular Physics
Dr. Tanuj Dhawan	Material Science (Nanotechnology)
Dr. Shivani Agarwal	Material Sciences
Dr. Rajan Walia	Experimental Condensed Matter Physics
Mr. Dibyajyoti Das	Laser Physics
Ms. Shagun Nagpal	Solid State Physics
Mr. Chattarpal	Spintronics
<b>SANSKRIT</b>	
Dr. Sandhya Rathore	Sanskrit Vyakaran
Dr. Ranjit Kumar Mishra	Sanskrit Vyakaran
Mr. Avnish Kumar	Sanskrit Vyakaran
Dr. Braham Prakash	Sanskrit Vyakaran
Dr. Sateesh Kumar Mishra	Advaita Vedanta Philosophy
Dr. Ratish Chandra Jha	Sanskrit Vyakaran
Mr. Ajit Kumar	Sanskrit Vyakaran
<b>ZOOLOGY</b>	
Dr. Shashi Dhingra	Physiology & Biochemistry
Dr. Neelam Gandhi	Neurophysiology Endocrinology
Dr. Hardeep Kaur	Entomology & Biodiversity
Mr. Dinesh Kr. Gautam	Endocrinology
Dr. Vandana Km. Singh	Cell and Molecular Biology
Dr. Lokesh Chandra Mishra	Molecular Parasitology & Immunology
Dr. Kavary Chakrabarty	Human Physiology
Dr. Pooja Arora	Immunology & Cell & Molecular Biology
Dr. Farhat Jahan	Fish Biology & Physiology
Dr. Able Hutten	Fish Biology
Dr. Jaya Malohtra	Biotechnology & Molecular Biology
Dr. Sudhida Gautam	Entomology

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students.**

As an institution we believe in continual sharing and enrichment of our knowledge. On a routine basis, the college invites researchers and scholars of national and international repute to deliberate on modern aspects of innovation and research, as well as engage in discussions about social issues and interact with students. Lecture series, Conferences and/or Seminars and Workshops are conducted from time to time by the constituent departments, societies and clubs of the college. The college shares an MoU with National Institute of Immunology (NII) for Science SETU Programme.

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

In the college, 1 % of the faculty members had utilized Sabbatical Leave. Dr. Monmayee Basu (2013) has taken Sabbatical Leave for writing a book, which will be published soon.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community.**

Knowledge is sought to be imparted to the student community through classroom teaching, and tutorial discussions. Seminars and conference conducted in the college add immensely towards creating awareness of the latest happenings in research. By participating in the University of Delhi annual cultural festival, Antardhvani, we get a perfect platform to showcase our findings to the community. Further, publication and presentation of articles in reputed journals and/or in various national and international conferences serves as a means of sharing the findings with the community.

The findings and designs in two of our innovation projects (HR 206, and HR 207) sanctioned to department of Physics and Electronics have been approved for commercial development and productivity by the industry for the benefit of the society.

**Rechargeable Solar LED bulb**

The primary source of inspiration for the project being the need to provide a clean alternate lighting source for the rural areas which are still devoid of the basic amenities of cheap, and 24 hour availability of electrical energy. The concept visualized was to design a self-contained single unit consisting of the solar conversion module, energy storage module, control electronics and the solid state illumination source. The unit has automated control for the charging and discharging along with smart control for the illumination levels and ambient light detection. The simple but high level of automation has been provided to keep the operation as simple as possible with minimum technical operation requirements from the user.

The rechargeable Solar LED bulb as a single unit is an innovation in itself. The design integrates three of the recent and developed technologies on a single platform along with the added features of the embedded software control. This project has motivated the students to work out their own small electronic projects. The project also promotes the use of open





source software and hardware tools and sharing of knowledge. The components used are commercially available off the shelf components which have allowed us to keep the cost down. The automation and open source design allows for ease of use with minimum user intervention and easy adaptability as the hardware can be reprogrammed numerous times without any physical modifications. The final prototype has been designed and tested and the technology is ready for transfer to the industry.

### **Solar Charging Module with Auto Tracking feature is designed as a Do It Yourself (DIY) Model**

The Solar Charging Module with Auto Tracking feature is designed as a Do It Yourself (DIY) Model for the purpose of understanding the functioning of each component to the student members in the project. The model is designed such that a novice with a Connection Manual can assemble the components to develop the designed model. The model developed in this project was primarily for the education purpose. The students in their curriculum learn the concepts, principle and understand its applicability theoretically and this project served the purpose of implying their concepts with a hands-on project to co-relate with it theoretically.

The solar tracker energy conversion module can be easily customized for different charging combinations. The applications can extend, after optimizing components, cost and feasibility, as follows:

1. The designed Multi charger
2. A setup for charging hub in rural areas
3. To drive cyber café etc. with own charging station
4. To drive ATM, Post Offices etc. in rural areas to meet up the demands of the Power Crisis.
5. Building solutions at large scale are part of program driven by the Government itself.

The project is aimed to replace AC/DC charging stations/units with a Green energy compliant module. The module will help both rural and urban areas by saving electricity; as unit is itself competent of handling supply to its charging stage and control unit. The innovative concept in the project is that the components used i.e. hardware components are easily available and software is open-source. Anyone is free to modify and enhance the designed module as the components used are not under any copyright issue. Since, the module designed is open source based product; hence the user is free to use/create this module by its own. The module comprises of charging various electronic appliances and itself show the universality of the module. To add-up the module will be beneficial for rural areas and electricity crises areas as the concept is to utilize solar energy to charge the appliances. The use of solar energy is a merit of this module over the conventional power banks available in the market.

In 2012, the college organized innovation in Science Pursuit for Inspired Research INSPIRE Internship Program to attract school students towards science and research. The Science Camp was held from 17<sup>th</sup> to 21<sup>st</sup> December 2012 in the college premises. Implemented by the Department of Science and Technology (DST), New Delhi, it is a programme launched by Govt. of India to inspire students into natural science streams and to strengthen the National Science and Technology base in India.

Mentors and invited speakers for INSPIRE internship were various Academy Fellows, Bhatnagar Awardees, Eminent Scientists and Academicians of National and International





repute (Prof. Deepak Pental, Prof. B. C. Das, Prof. Ashok K. Ganguly, Prof. Vikram Kumar, Prof. S.K. Tandon, Prof. Sanjay Puri and Prof. Madan Mohan Chaturvedi). Mentors interacted with the students of 30 topmost schools of Delhi through lectures related to scientific success stories and joys of innovations across all Science streams which in turn nourished the curiosity of participants in Sciences to help them to think out of the box and attract them to enroll and pursue their academics/ careers in Sciences. Practical sessions were also conducted by the college faculty in the Science Departments of the college.

### **3.2 Resource Mobilization for Research**

#### **3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

Hansraj is an undergraduate college affiliated to University of Delhi. UGC does not allocate funds for research in the undergraduate colleges. The faculty members generate funds by submitting research proposals to various funding agencies like (UGC, DST, DBT, NMPB etc.). Once the projects are sanctioned, the college facilitates the availability of infrastructure and related amenities for smooth functioning of the projects. Besides, Hansraj College has also been receiving grants under Star College scheme of DBT since 2013. So far, the college has received a grant of Rs 29,00,000/- + 9,00,000 for 2013-14 and 2014-15, respectively for developing research facilities for the students of departments of Physics, Chemistry, Botany and Zoology. Funds have also been received from University of Delhi under Innovation Project scheme to foster undergraduate student research. Hansraj College has completed 11 such projects successfully and also got many awards as mentioned in Section 3.2.7. 13 Innovation Projects have been sanctioned in the current academic year (2015-2016).

#### **3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

There is no such provision to provide seed money to the faculty for research.

#### **3.2.3 What are the financial provisions made available to support student research projects by students?**

Since 2012, student research has got a financial support system in the form of innovation project scheme launched by University of Delhi. The college faculty has actively participated in this scheme and 240 students, who have been a part of these 24 (1+10+13) awarded innovation projects, have got hands on research training. There is a provision of stipend (Rs. 1000/- per month) per student as well. The faculty members have received many innovation research awards including Best Innovative Idea, Teaching Excellence and the Best display award (Detail in 3.2.7).

The finances for meeting the expenditure incurred for procuring the equipments chemicals and glassware is also met by the Star College Grant available to the students of four science departments viz Botany, Chemistry, Physics and Electronics & Zoology.



### 3.2.4 How does the various departments/units/staff of the institute interact in inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

Some of the Departments in the institution collaborate with each other for undertaking inter-disciplinary research under the umbrella of innovation projects and the STAR College Scheme. Currently there are 13 ongoing innovation projects in the institution with the financial assistance of University of Delhi. The details are as under:

**Departments of Botany and Zoology** Under collaboration, worked on the following two projects (2014-15), entitled “Survey the packaged foods for macronutrients and analysis their nutritional value and “Estimation of consumption of fat, salt, sugar etc vis-à-vis actual requirement in daily food intake”.

**Departments of Physics and Electronics** collaborated and carried out the student project entitled “List 10-15 electrical appliances along with their brands used at home. Find out the BEE rating of each. Suggest the measures for saving power for any one device” (2014-15)

*Table 3.7: Number of innovation projects sanctioned during last four years*

YEAR	NUMBER OF INNOVATION PROJECTS
2012-13	1
2013-15	10
2015-16	13

*Fig 3.2: Innovation projects sanctioned during the last four years*

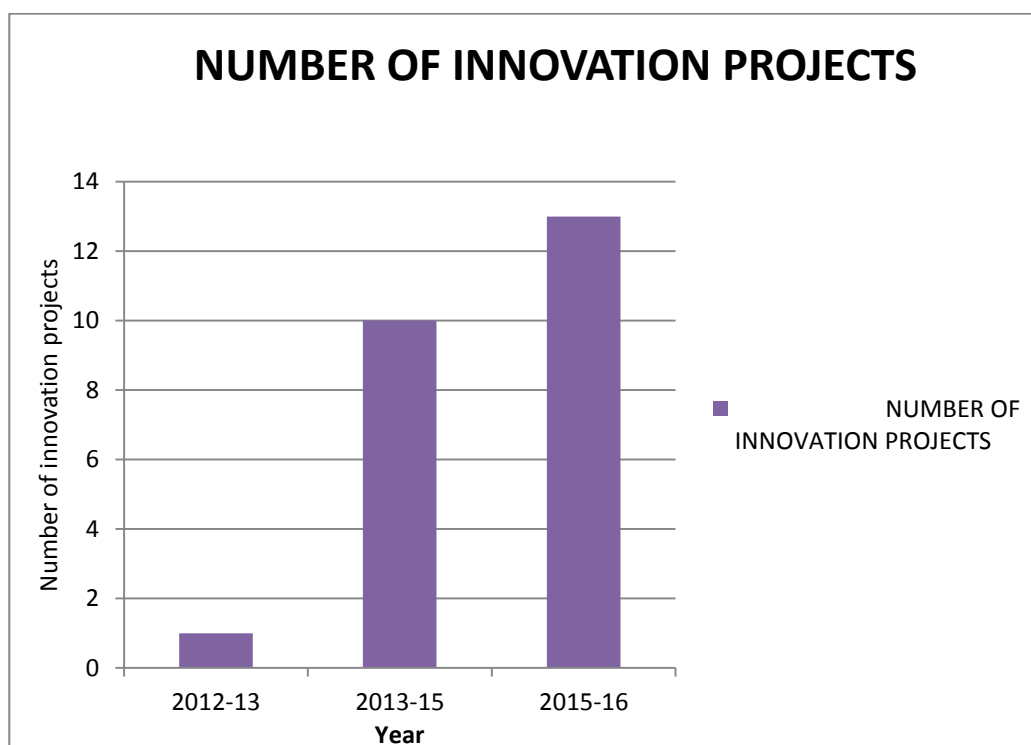




Table 3.8: Innovation Projects sanctioned during 2015-16

Project Code	Title	Faculty Members	Amount Sanctioned (Rs.)
HRC 301	"Masses of charmonium states in isospin asymmetric strange hadronic matter and their implications in heavy ion collision experiments"	<i>Dr. Sushil Kumar Dr. Pradeep Kumar Dr. Mona Bhatnagar Dr. Bijendra Singh</i>	5,00,000/-
HRC 302	"Development of mobile based application for the real time localization and identification of selected flora in University of Delhi"	<i>Dr. Romila Rawat Bisht Dr. V.S. Sajwan Dr. Shivani Agarwal Dr. Shalini Kaushik Love</i>	3,50,000/-
HRC 303	"Extraction and utilization of natural pigments in cosmetics"	<i>Dr. Vijay Rani Rajpal Dr. Ambika Dr. Anjali Saxena</i>	3,50,000/-
HRC 304	"Study and security analysis of smart cards"	<i>Dr. Arvind Mr. Brij Mohan Ms Aditi</i>	5,00,000/-
HRC 305	"Nutritional profiling and its correlation with functional respiratory capacity in soldiers/volunteers"	<i>Dr. Kaveri Chakrabarty Dr. Dinesh K. Gautam Dr. Satyakam Guha</i>	5,00,000/-
HRC 306	"Utilization of Delhi Garden waste for renewable and sustainable energy production"	<i>Dr. Anand Sonkar Dr. Manoj Kumar Dr. Amit Rawat Dr. Amar Kumar</i>	5,00,000/-
HRC 307	"Device for Uniquely abled (DUA)"	<i>Dr. Harmeet Kaur Dr. Baljeet Kaur Mr. Dibyajyoti Das</i>	7,50,000/-
HRC 308	"Engineered biocompatible organic nanoarchitectures: A new paradigm for disinfections"	<i>Dr. Shweta Rastogi Dr. Brijesh Rathi Dr. Himanshu Dr. Pooja Arora</i>	5,00,000/-
HRC 309	"Development of visible light activated photocatalyst for water treatment"	<i>Dr. Pratibha Tewari Dr. Maya Verma Dr. Hema Chutani</i>	5,00,000/-
HRC 310	"Emergency management solutions: Design of solar based ecofriendly, efficient and portable lighting /Power water conditioning and thermo-electric solutions"	<i>Dr. Amit Sehgal Dr. Sukhbinder S. Rait Dr. Namrata Soni</i>	5,00,000/-
HRC 311	"Study of germicidal properties of fumes generated in havan (Yagya) in order to assess potentiality of havan in curing some infections and air borne diseases"	<i>Dr. Monika Koul Dr. Ishwar Singh Mr. Avnish</i>	4,00,000/-
HRC 312	"Synthesis of drug doped silica nanoparticles for bio-imaging and therapeutic applications"	<i>Dr. Chetna Gupta Dr. Parul Pant Dr. Farhat Jahan</i>	5,00,000/-
HRC 313	"Critical and scientific analysis on use of alternative medicines with practical approach and case studies"	<i>Dr. Lokesh C. Mishra Dr. Archana Singh Dr. Jyoti Bhola</i>	3,50,000/-
<b>TOTAL SANCTIONED AMOUNT</b>			<b>62,00,000/-</b>



### 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

The college has adopted a strategy whereby the equipment and resources like computers are pooled which has resulted in their optimal use. Book pooling is also in place so that expensive books can be bought and can be used in an efficient way by the different departments. Further, the research committee has recommended the setting up of research centres and accordingly process has been initiated to provide a common place to all the faculty members where instruments procured from different projects can be housed for their optimal utilization.

### 3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

The institution has received fund from Department of Biotechnology (DBT) under STAR College Scheme under following heads:

**Table 3.9: Grants received during the last four years**

Period	Recurring (Rs.)	Nonrecurring (Rs.)	Travel (Rs.)	Total (Rs.)
First Phase (2013-14)	8,00,000/-	20,00,000/-	1,00,000/-	29,00,000/-
Second Phase (2015-16)	8,00,000/-	-	1,00,000/-	9,00,000/-

#### **DBT grant utilization:**

#### **A) Non-recurring (Equipment and Books & Journals)**

**Table 3.10: List of Equipments procured**

S.N.	Equipment Name (Model No.)	Quantity	Cost (Rs)	Date of Order Placed	Purchase/ Installed
1.	Digital Storage Oscilloscope Agilent DSO1052B	10	$18,816.5 \times 10$ = 1881650	23.01.2014	Installed
2.	Function Generator GW Instek SFG-1013	10	$13,650 \times 10$ = 136500	23.01.2014	Installed
3.	Linear DC Power Supply GW Instek GPS-3303	8	$25,153.8 \times 8$ = 2,01,230	23.01.2014	Installed
4.	Trinocular Upright Microscope with Digital Camera – Primostar Carl Zeiss, Germany	1	2,02,359	12.02.2014	Purchased
5.	UV-visible spectrophotometer Shimadzu UV1800	1	3,78,000	26.02.2014	Installed
6.	Agarose Gel Electrophoresis Equipment	1	29,180	07.02.2014	Purchased
7.	Mechanical (orbital) shaker – BT-TS-560D	1	1,81,125	07.03.2014	Installed
8.	Ice Flaking Machine	1	1,03,950	13.02.2014	Installed
9.	Thermal Cycler BIORAD T100 Gradient	1	2,83,125	17.02.2014	Installed
10.	Water purifier (RO + Filter) Aquaguard	1	17,000	03.04.2014	Installed

**Table 3.11a: Funds utilized to procure Books and Journals**

S.No.	Department/Article	Cost (Rs.)
1.	Botany	26,648
2.	Chemistry	19,509
3.	Physics and Electronics	9,888
4.	Zoology	16,861
5.	Biotech Express – a monthly magazine (Subscription for five years)	8,000

**Table 3.11b: Details of Recurring grants**

Department	Heads	Amount (Rs.)
Botany	Chemicals and Glassware	1,20,323
	Travel	18,890
	Miscellaneous	34,139
Physics and Electronics	Electronic Component/lab utilities	1,13,460
	Travel	9,445
	Miscellaneous	67,207
Chemistry	Chemicals and Glassware	1,45,983
	Travel	9,445
	Miscellaneous	25,063
Zoology	Chemicals	1,04,368
	Glassware	19,050
	Travel	16,792
	Miscellaneous	34,929

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.**

The College received grants (Research and Travel) from various agencies and sponsors. Details are given below regarding the grants received:

**Table 3.12: Grants received for the Innovation Projects sanctioned during 2012-13**

Project Code	Title	Faculty Members	Amount Sanctioned (Rs)
HR 101	राष्ट्रीय राजधानी क्षेत्र में दृष्टिबाधितों से सम्बंधित संस्थाओं एवं संस्थानों की उपलब्धियाँ और चुनौतियाँ	Dr. Rama Dr. Vijay Kr Mishra Dr. Satessh Kumar Mishra	10,00,000/-



Table 3.13: Grants received for the Innovation Projects sanctioned during 2013-15

Project Code	Title	Faculty Members	Amount Sanctioned (Rs)
HR 201	Plant Invasion: Exploring Ploidy Connection	Dr. Vijay Rani Rajpal Dr. Manju Mathur Dr. Neelam Gandhi	6,00,000/-
HR 202	Isolation and characterization of protein components of milk from different sources	Dr. Shampa Bhattacharyya Dr. Renu Parashar Dr. Hema Chutani	6,50,000/-
HR 203	Comprehension of ethnic practices of selected Indian tribes as pro-ecological customs and their deviation from the stream(Received Best Display Award)	Dr. Lokesh C. Mishra Dr. Vandana K. Singh Dr. Archana Singh	3,50,000/-
HR 204	Public Private Puzzle in Education - where the parents want to send the children and why	Dr. Sushma Rani Ms. Preetinder Kaur Ms. Simran Sethi	3,50,000/-
HR 205	Developing a synthetic molecule imitating the properties of hemoglobin to reduce carbon monoxide emission from automobile exhaust	Dr. Dinesh K.Gautam Dr. Ambika Mr. Satish Chand	6,50,000/-
HR 206	Development of an Eco-Friendly, Efficient, Portable Lighting Source Utilizing a Renewable Energy Source and a Solid State Lighting Solution – Solar LED Bulb (Received Best Innovative Idea award)	Sh. P.K.Singh Dr. Namrata Soni Dr. Sukhbinder S.Rait	7,00,000/-
HR 207	Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances (Received Best Innovative Idea Award & Best Display Award)	Dr. AmitSehgal Dr. Sushil Kumar Dr. RajanWalia	3,50,000/-
HR 208	<i>Mithaas</i>	Ms. Sonal Gupta Dr. Kishan Sachdeva Dr. Ramashankar Kushwaha	3,00,000/-
HR 209	Understanding the physical and geometrical behavior of differential equations and its applicability to the real world	Dr. Chetana Jain Dr. Arvind Dr. Tanuj Dhawan	3,50,000/-
HR 210	Development of zero discharge, affordable, carbon neutral and eco-friendly bio-fuel using in-house horticultural waste (Received Best Innovative Idea Award)	Dr. Anand Sonkar Dr. Manoj Kumar Dr. Aparna Garg Dr. Amar Kumar	6,50,000/-
<b>TOTAL GRANT</b>			<b>49,50,000/-</b>

**INNOVATION PROJECTS 2015-16:** Details given in 3.2.4



Table 3.14: Research Projects sanctioned to the faculty during last four years

Name	Department	Year	Title	Funding Agency Grant and Scheme
Dr. Archana Singh	Botany	2013-16	Cloning and Functional Characterization of Helicoverpa inducible Hevein-like-protein from Chickpea	DST-SERB (Rs 18,25,000/-) Govt. of India
Dr. Anand Sonkar	Botany	2013-15	Taxonomic and Phylogenetic Studies on the Genus <i>Heracleum</i> L. in India	DST-SERB (Rs.12,00,000/-) Govt. of India
Dr. T. Shimrah	Botany	2013-15	Land Use Change and Soil Organic Carbon Stock in Ecologically Strategic Upland Village Agro-ecosystems in North-East India; A Case Study in Shirui National Park	DST-SERB (Rs.12,00,000/-) Govt. of India
Dr. Vijay Rani Rajpal	Botany	2014-17	Autotetraploid Induction, Ensuing Hetroplod Hybridization and Associated Rapid DNA Changes as a Possible Means of Genetic Improvement of the Diploid <i>Tinospora cordifolia</i> and <i>Pluchea lanceolata</i>	National Medicinal Plant Board (NMPB), (Rs 24,00,000/-) Major Research Project
Dr. Monika Kaul	Botany	2015	Evaluation and Analysis of Four Medicinal Plants for their Pollution Load in Wild, Cultivated and Controlled Conditions and Response of their Bioactive Constituents in terms of Yield and Quality	UGC-MHRD (Rs 9,81,000/-)
Dr. Manjit Singh Saggi	Commerce	2013-till date	XBRL Based Corporate Disclosure Practices in India-Opportunities and Challenges	UGC (Rs 7,14,600/-) Major
Dr. Rama	Hindi	2011-13	<i>Stree Asmita Aur Hindi Dainik</i>	UGC (Rs. 12,99,600/-) Major





Table 3.15: Travel Grant availed by the faculty during last four years

Faculty	Year	Funding Agency Amount	Title & Purpose of visit
Dr. Maya Verma	2011	UGC Rs 150000/-	Poster Presentation, 5 <sup>th</sup> International Conference on Electroceramics, Sydney, Australia
Dr. Rajan Walia	2011	CSIR Rs 21000/-	Paper Presentation, International Conference on materials for advanced technologies (ICMAT), Singapore, Presented on Co/Pt for multilayer magnetic storage application,
Dr. Tanuj Dhawan	2011	DST Rs 60000/-	Poster Presentation, International Conference on materials for advanced technologies (ICMAT), Singapore
Dr. Meenakshi Malhotra	2011	University of Delhi Rs 86000/-	Paper Presentation, International Conference, Spanish Association for Indian Studies, Tenerife, Canary Islands
Dr. Manoj Agarwal	2011	UGC Rs 140000/-	Paper Presentation, 4 <sup>th</sup> International Conference on Intelligent Robotics and Applications (ICIRA 2011), Germany
Dr. Manjit Singh Saggi	2011	UGC Rs 99694/-	Paper Presentation, Timeliness Analysis of Corporate Disclosures in India at 23 <sup>rd</sup> Asia Pacific Conference on International Accounting Issues, China
Dr. Meenakshi Malhotra	2012	UGC Rs 109000/-	Paper Presentation, Dark Goddess and the Nation, in Prague
Mr. Arnab Dasgupta	2012	University of Delhi Rs 110000/-	Paper Presentation, Conference on Tagore, Edinburgh
Dr. Nivedita Sen	2012	University of Delhi Rs 110000/-	Paper Presentation, Conference on Tagore, Edinburgh
Dr. Baljeet Kaur	2013	UGC Rs 150000/-	Paper Presentation, 17 <sup>th</sup> Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2013), Gold Coast, Australia
Mr. Santosh Hasnu	2014	Swiss National Science Foundation Rs.53,000/- (approx.)	Paper Presentation, European Conference on South Asian Studies 2014 (ECSAS) at University of Zurich, Switzerland
Dr. Sushma Rani	2014	UGC Rs 120000/-	Paper Presentation, Emotional Intelligence Among Teachers; A Case Study of School Teachers at International Conference on Intellectual Capital and Education at Poland
Dr. Nivedita Sen	2015	UGC Rs 100000/-	Paper Presentation, Conference on Alice in Wonderland, Cambridge
Dr. Archana Singh	2015	DST-SERB Rs 96444/-	Poster presentation on “ Functional Characterization of Helicoverpa-inducible pathogenesis related protein 4 A from chickpea” at “Plant Biology 2015” at Minnesota, USA



### **3.3 Research Facilities**

#### **3.3.1 What are the research facilities available to the students and research scholars within the campus?**

Hansraj College is dedicated to the creation and up-gradation of research facilities and infrastructure that are renewed from time to time to meet the requirements of the students and faculty. A central research committee has been constituted to cater to the needs and to facilitate and enhance teaching-learning process and research activities in the college. The college campus is Wi-Fi enabled with access to all the resources that the University provides centrally. Computers with internet connection are available both for students and teachers in the library, staff room and computer labs. The college library and the computer laboratories have access to advance web facility and have subscription to E-resources through DU Network that links students and faculty researchers to the databases needed for research. Every science department has many laboratories and also a research laboratory available where students and faculty carry out research activities.

#### **3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?**

As part of above criterion, the college has set up three research centers namely Mahatma Hansraj Research Center (MHRC) in Life Sciences, Mahatma Hansraj Research Centre (MHRC) in Linguistics and *Vishveshvaranand Vedic* Research Institute (VVRI) centre (For details please refer to 3.1.1). Wi-Fi connectivity, the availability of laptops and desktops, laboratories, research laboratories, and equipments as procured under STAR College Scheme for the science departments, availability of a language laboratory, a Vedic research centre and aids for specially abled persons are parts of the institution's strategy to make the research climate of college inclusive and diverse.

#### **3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments/facilities created during the last four years?**

Yes, Hansraj College has been fortunate enough to receive special grants under the aegis of STAR College Scheme sponsored by the Department of Biotechnology (DBT), Government of India. The mandate of this programme is to primarily improve the biotechnology component in the existing syllabi by means of critical innovative thinking and by providing the students with hands on training. The college organizes research oriented events under this programme and has upgraded the scientific infrastructure of the college. There are four participating departments viz. Department of Botany, Chemistry, Physics & Electronics and Zoology. Students of these departments have been involved in minor research projects which are primarily interdisciplinary in nature. For details of equipments procured, please refer to section 3.2.6.

Grants have also been received to purchase books/journals/periodicals under this scheme (For details, please refer to Section 3.2.6)



### 3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

HRC believes in the spirit of sharing knowledge and spreading the light of learning. This calls for instances of intellectual and academic exposition to the students. Students from various disciplines are taken to visit the leading national and international research labs in the city like NIPGR, Department of Biotechnology and Life Sciences JNU, ICGB, Department of Biotechnology, IP university, Center for Science and Environment, NII. With these visits, the students not only get acquainted with the latest research being conducted, they also develop keen research acumen. The students are encouraged to join summer training workshops and internships in research institutes. Every year students from all the disciplines participate in these workshops/internship programmes. Further, under the innovation projects, the participating students get a chance to partly work in the research laboratories of respective mentors, who are generally professors in the university postgraduate departments and research institutes to give them an exposure to the latest techniques being practiced in research. Field trips play an important role in understanding the flora, fauna and environment, in subjects like Botany, Zoology and Life Sciences. The students of these disciplines are regularly taken to local and outstation field trips. Trips and heritage walks are also organized for the students of history to make them understand the importance of preservation of ancient monuments.

Students are encouraged to participate in summer internship programmes. The following students participated in such programmes for the last four years

**Table 3.16: Summer Internship Programmes attended by the students**

Name of the Student	Course	Year Attended	Summer Training attended at/with
Netra Bhandari	B.Ss.(Prog.) Life Sciences	2014	NCBS, Bangalore
Arjun Adit	B.Ss.(H) Botany III	2014	Science Academy Fellowship for undergraduate students, Goa
Somesh, Gunjan	B.Ss.(H) Botany III	2015	Department of Biophysics, South Campus, University of Delhi
Akanksha & Utkarsha Rathee	B.Ss.(H) Botany (hons) III	2015	Dr. Sudeshna Majumdar, Botany Department, University of Delhi
Vibhuti, Sunny, Tarun, Mahika, Vivek	B.Ss.(H) Botany III	2015	Dr. Shubhra, Miranda House, University of Delhi
Radhika, Charu, Amit	B.Ss.(H) Botany III	2015	Dr. Rekha Gupta, Miranda House, University of Delhi
Shashank	B.Ss.(H) Botany III	2015	Dr. Sadhna, Miranda House, University of Delhi
Kaushal	B.Ss.(H) Botany III	2015	Dr. Somdutta, Miranda House, University of Delhi
Vibhuti, Utkarsha, Divya, Aashima	B.Ss.(H) Botany III	2015	ITDM (NGO)
Arti	B.Ss.(H) Zoology III	2013	DIPAS
Sanskriti	B.Ss.(H) Zoology III	2015	DIPAS



Nitin, Nitika, Raman, Nitish	B.Ss.(H) Zoology II	2015	National Institute of Immunology, New Delhi
Zamal	B.Ss.(H) Zoology II	2015	IGIB, Mall Road, New Delhi
Mani Garg	B.Sc.(H) Zoology III	2015	NCCS, Pune
Divya Gulati	B.Sc.(H) Zoology III	2015	ACBR, University of Delhi
Rishu Jain	B.Sc.(H) Zoology III	2015	NIRRH, Mumbai
Nitika	B.Sc.(H) Zoology III	2015	NII, Delhi
Raman Sharma	B.Sc.(H) Zoology III	2015	NII, Delhi
Anubhuti Arora	B.Sc.(H) Zoology III	2015	ILBS, Delhi
Nitish Chauhan	B.Sc.(H) Zoology III	2015	NII, Delhi
Mohammad Yusuf Zamal	B.Sc.(H) Zoology III	2015	IGIB, Delhi
Nitin Yadav	B.Sc.(H) Zoology III	2015	DIPAS, DR.DO, Delhi
Navpreet	B.Sc.(H) Zoology III	2015	Department of Botany, DU
Tenzen Ngawang	B.Sc.(H) Zoology III	2015	NCBS, Bengaluru
Deepak	B.Sc.(H) Zoology III	2015	Summer workshop in Recombinant Biotechnology, Miranda House DU
Advaita Ravindran	B.Sc.(H) Zoology III	2014	Delhi Zoo
Pavitra Joshi	B.Sc.(H) Zoology II	2015	UMEED, Khanpur, Deoli, Saket
Purvash Jha	B.Sc.(H) Zoology II	2015	ECOSPHERE, Spiti Himachal Pradesh
Sutirtha Lahiri	B.Sc.(H) Zoology II	2015	Nature Conservation Foundation, Pakke Tiger Reserve, Arunachal Pradesh
Anshika Goel Shubhi Sharma	B.Sc.(H) Chemistry III	2015	Central Forensic Science Laboratory
Rihan Ahmed Sangeeta Sangwan Ashish Garg Mohit Yadav	B.Sc.(H) Chemistry II,III	2015	Caffeine Determination in Soft Drinks
Parul Kajal Nikita Jain Sahil Khanna Shreesh Kala	B.Sc.(H) Chemistry III	2015	Spot Test Analysis for Cations
Kritika Nagpal	B.Sc.(H) Chemistry III	2015	Going Green: To Measure the Conductivity, pH, Dissolved Oxygen in Yamuna Water using Probes.
Nikita Jain	B.Sc.(H) Chemistry III	2015	Characterization of Copper Nanoparticles
Ankita Parmar Shubhi Sharma	B.Sc.(H) Chemistry III	2015	HR interns at Bajaj Hindustan Ltd
Shubhi Sharma Nishu Jain	B.Sc.(H) Chemistry III	2015	Marketing interns at Helpiez.org
Nishu Jain	B.Sc.(H) Chemistry III	2015	Codifier Technologies as a content writer

For research, students and faculty members also use leading libraries in Delhi such as Central Science Library, Central Reference Library, Ratan Tata Library, National Medical Library, and library facilities in IARI, IITs, JNU, and TERI for reference. The table below gives a flavor of such activities although the details are provided in the departmental proformas.

**Table 3.17: Details of Departmental activities for updation on Academics/Research**

S.No	Department	Activities
1.	Commerce	Department of Commerce has a culture to inculcate an aptitude of research among its students. In tune with this spirit, every year, third year students of commerce department undertake 'Project Work' as a part of their curriculum requirement. The students are supposed to gather information company, agency, social initiative, brand, cases and so on by way of surveys/internship/literature survey about a company or NGO. The faculty at commerce department mentors them in this endeavour. Such projects not only enhance their research ability but also provide them practical knowledge. These projects also provide students an opportunity to have successful interface with the industry.
2.	History	Heritage Walks, Visits to National Museum and National Art Gallery, Trips to historical places in Delhi and outside, Screening Films related to history. These activities sensitizes students to the importance of preservation of historical monuments, our cultural heritage, and environment.
3.	Philosophy	Visit ICPR (Indian Council of Philosophical Research), Tuglakabad, New Delhi for research work.
4.	Botany	Students from Department of Botany and Life Science regularly visit institutes like Centre for Science and Environment, Aravali Biodiversity Park, Yamuna Biodiversity Park, other National Parks and sanctuaries to increase Environmental Awareness. Students of Botany (Hons) were taken to National Institute of Immunology, New Delhi on Oct 10 <sup>th</sup> 2013. An Educational Trip was taken to Amity University, Noida and to Surajpur Wetland Reserve at Dadri, Haryana on oct. 23, 2014. Last year students visited Jim Corbett National Park. A visit to NIPGR, New Delhi is planned for students of B. Sc. (H) Botany on Oct 1, 2015
5.	Zoology	Students from Department of Zoology and B. Sc. Life Sciences visited institutes such as Codon Biotech Private Limited, NOIDA, Yamuna Biodiversity Park, Himalayan Mountaineering Institute, Manali, H.P. National Institute of Plant Genome Research, New Delhi. Under Science SETU programme in which college shares MOU with NII, the department of Zoology has organised several activities like training in research techniques during summer vacation for the B.Sc. Zoology (Hons) students in 2015; Lecture-cum-Hands-on training was given to the students on Bioinformatics tools in September 2015, A lecture on Bioinformatics at NIPGR; Various trips/visits for students to enhance learning & experience, have been organized like a visit to NDRI Karnal to study and observe latest technology used in animal husbandry; some other visits include Krishi Mela at Pusa Institute, Family Planning Institute, DIPAS, National Institute of Immunology, AIIMS and blood bank & Thalassemia unit in St. Stephen's Hospital.
6.	Chemistry	The students of B.Sc. (H) Chemistry visited 'National Dairy Research Institute', Karnal, 'National Brain Research Center' Gurgaon, 'Midhills Rosin and Terpenes' Solan. Under the innovation project the students visited and worked at Paras dairy for the extraction of protein from milk, TERI Library at the India Habitat Center, TERI Gram Gurgaon, Kotputli Plant, Rajasthan.
7.	Physics & Electronics	Students of Department of Physics and Electronics visited "Device Fabrication laboratory" at the Department of Physics and Astrophysics, University of Delhi, Delhi; Students also visited National Physical Laboratory, New Delhi on occasion of Open Day on Sep 27 <sup>th</sup> 2013, Sep 30 <sup>th</sup> 2014 and Sep 30 <sup>th</sup> 2015.



**3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?**

The college campus is Wi-Fi enabled. The faculty members get free and constant access to fast internet. The College Library and the Computer laboratory have access to advanced web activity with its subscription to E-resources through DU Network that links students and faculty researchers to the data bases needed for research. The central and the departmental science libraries subscribe to various scientific journals.

**3.3.6 What are the collaborative research facilities developed / created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.**

Hansraj College supports collaborative and interdisciplinary research. The main aim behind collaborative research is to bridge the gap between disciplines and give holistic understanding to undergraduate students. The financial support provided to the departments of Botany, Zoology, Chemistry and Physics and Electronics in the form of STAR college grant sanctioned by DBT has helped to procure various equipment and convene various workshops and conferences (For details, please refer to Section 3.2.6).

Further, the college has signed a MoU with National Institute of Immunology (NII), New Delhi to foster undergraduate research. Under this, a lecture series by eminent scientists are in the pipeline. Two lectures have already been delivered under this programme in the college (for details please refer to Section 3.3.4).

Introduction of Innovation projects by D.U. has gone a long way to support interdisciplinary research at UG level in the college. Hansraj College has received financial assistance in the form of 24 different innovation projects in the last four years. 240 students (10 students per project) have been given hands-on training to meet the objectives of different projects. (For details please refer to Sections 3.1.5, 3.2.4 and 3.2.7).

**3.4 Research Publications and Awards****3.4.1 Highlight the major research achievements of the staff and students in terms of**

- \* **Patents obtained and filed (process and product):**
- \* **Original research contributing to product improvement:**
- \* **Research studies or surveys benefiting the community or improving the services:**
- \* **Research inputs contributing to new initiatives and social development:**

Two research projects are adopted by the industries to improve the existing one of the same types. For a detailed description, refer to Section 3.1.10 above.

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

No



## 3.4.3. Give details of faculty and students publications

Table 3.18: Details of Publications by Faculty members during the last four years

S. No.	Department	*Faculty Members	Books Coauthored/ Co-edited/ Monographs	Chapters In Books/ E-Resources	Papers In Journals (National/ International)	Paper(s) In Conferences (National/ International)
1.	Botany	9	1	9	12	5
2.	Chemistry	19	1	4	54	-
3.	Commerce	22	8	10	50	61
4.	Computer Science	8	-	5	39	17
5.	Economics	7	17	16	5	5
6.	English	13	14	13	76	-
7.	Hindi	10	34	8	63	12
8.	History	5	5	2	3	-
9.	Mathematics	8	1	3	20	-
10.	Philosophy	2	-	1	13	-
11.	Physics-Electronics	11	2	18	20	9
12.	Sanskrit	4	13	2	7	-
13.	Zoology	8	5	4	21	-
	TOTAL	126	101	95	383	109

Fig3.3: Graphical representation of faculty publications during last four years

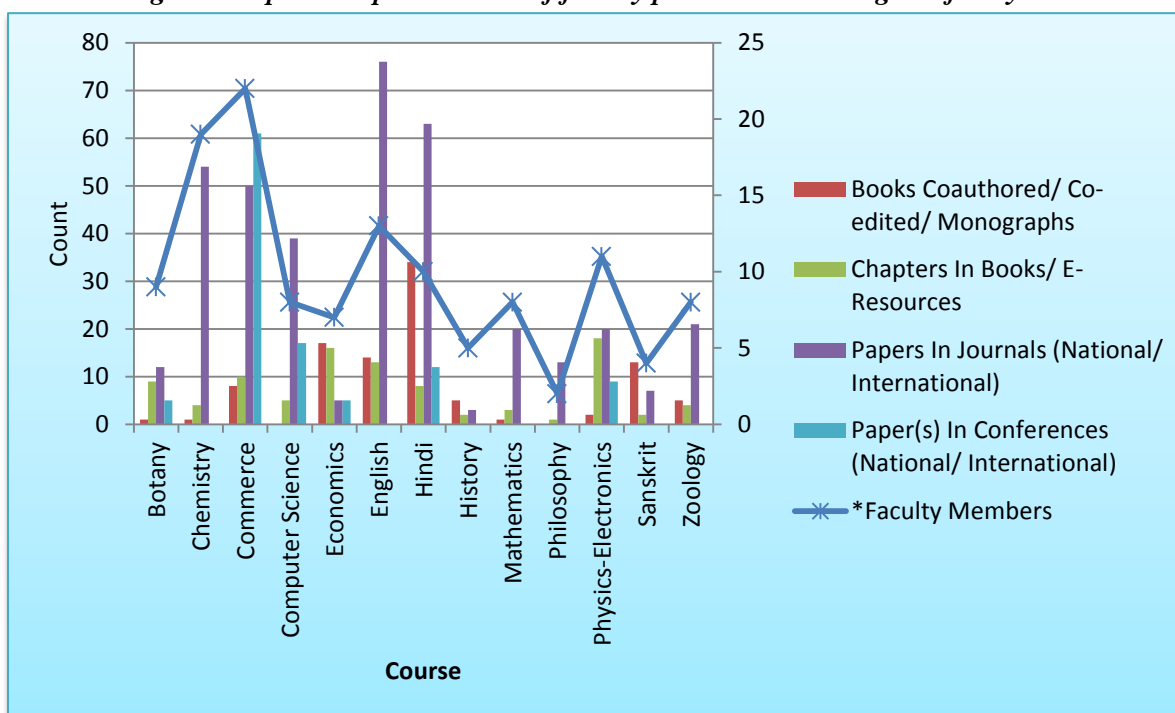






Table 3.19: Students Publications

S.N.	Student	Details
1.	Shriya Garg B. Com.(H)	Wrote a book titled 'Take One More Chance' published in the year 2011, published by Mahaveer Publishers (ISBN 9788183520140).
2.	Sirjan Ubha B. Com.(H)	Wrote a book titled 'The Triumph' published in the year 2014, published by Unistar Publications (ISBN 9789351134183).

Table 3.20: Awards Received by the Faculty during the last four years

S.N.	Faculty Name	Details
<b>BOTANY</b>		
1.	Dr. Ishwar Singh	Awarded with Raman Fellowship, An Indo-US initiative for research (2014)
2.	Dr. Anand Sonkar	Awarded with Teaching Excellence Award for Innovation by Delhi University, 2014-15. His innovation project entitled “ Development of zero discharge eco-friendly, affordable and carbon neutral bio-fuel using in house horticultural waste” was also awarded with the best innovative idea at Antardhwani (2015)
3.	Dr. Archana Singh	Awarded with Best display for Innovation Project, 2013-15.
4.	Dr. Monika Koul	Selected for Vice-Chancellor's Fellowship (2014), University of Delhi
<b>CHEMISTRY</b>		
5.	Dr. Manoj Kumar	Teaching Excellence Award In Innovation by University of Delhi for innovation project HR-210 (2015).
6.	Dr. Aparna Garg	Teaching Excellence Award In Innovation by University of Delhi for innovation project HR-210 (2015).
<b>COMMERCE</b>		
7.	Dr. Sonal Gupta	Won leadership award in acknowledgement of leadership as <i>Enactus</i> Faculty Advisor towards the professional development and personal development of <i>Enactus</i> Students in “India National Competition 2014” organized by <i>Enactus</i> India on July 1-2, 2014 at Taj Land's End, Bandra, Mumbai.
8.	Dr. Meghna Malhotra	Received Best Paper Award in National Conference On “Indian Capital Market: Emerging Issues” organized by IBS Business School, Gurgaon in 2015
<b>ENGLISH</b>		
9.	Mr. Arnab Dasgupta	Best Teacher Award from University of Delhi (2014)
10.	Ms. Supurna Dasgupta	Awarded The Second Best Research Paper by a Young Scholar in the Department of English conference held in September 2015.
<b>HINDI</b>		
11.	Dr. Rama	<i>Sarwsheshth Pustak Lekhika</i> Award by Media Map Magazine (2014)
12.	Dr. Rama	<i>MahaBharti Sammaan</i> by <i>Swadesh Hindu Ekta Manch</i> (Regd.) (2014)
13.	Dr. Rama	30 <sup>th</sup> Dr. Ramakrishnan Memorial National Teacher Award by an association of freelance journalists and writers of India (Regd.) (2014)
14.	Dr. Rama	<i>Vishishth Hindi Patrakarita Shikshak Puraskar</i> by <i>Padm Bhushan Swami Kalyan Dev Bhartiya Bhasha Patrakarita Shikshak Puraskaramiti</i> , Delhi (2013)



PHILOSOPHY		
15.	Dr. Aamir Riyaz	Awarded <i>Maa Bhakti Samman</i> by <i>Swadesh Hindu Ekta Manch</i> , for his contribution in religious and cultural fields (2015)
PHYSICS & ELECTRONICS		
16.	Dr. Amit Sehgal	Awarded title of Champion in D-LITE Course conducted by Campus of Open Learning (COL), University of Delhi and Edinburgh College, UK at COL, Keshav Puram on November 18-21, 2013.
17.	Dr. Amit Sehgal	Awarded with Best display for Innovation Project, 2013-15.
18.	Mr. Sushil Kumar	Awarded with Best display for Innovation Project, 2013-15.
19.	Dr. Rajan Walia	Awarded with Best display for Innovation Project, 2013-15.
20.	Dr. Amit Sehgal	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
21.	Mr. Sushil Kumar	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
22.	Dr. Rajan Walia	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
23.	Dr. Amit Sehgal	Best Innovative Idea Award by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
24.	Mr. Sushil Kumar	Best Innovative Idea Award by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
25.	Dr. Rajan Walia	Best Innovative Idea Award by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
26.	Dr. Namrata Soni	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb" (2015).
27.	Sh. P. K. Singh	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb" (2015).
28.	Dr. Sukhbinder Singh Rait	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb" (2015).
ZOOLOGY		
29.	Dr. Lokesh C. Mishra	Awarded with Best display for Innovation Project, 2013-15.



**Distinguished Teachers' Awards:** University of Delhi instituted Distinguished Teachers' Awards and recognized college teachers for excellence in undergraduate teaching in its constituent colleges in 2009. Six teachers from Hansraj College were awarded by Late honourable Dr. A. P. J. Abdul Kalam, the former President of India.

*Table 3.21: List of Distinguished Awardees*

S.N.	Faculty	Department
1.	Dr. M.S. Rawat	Department of Botany
2.	Dr. Krishan Sachdeva	Department of Commerce
3.	Dr. Anil S. Kokradhy	Department of Economics
4.	Dr. Sanjay Kumar	Department of English
5.	Dr. V. K. Kawatra	Department of Zoology
6.	Dr. Neelam Gandhi	Department of Zoology

### 3.5 Consultancy

#### 3.5.1 Give details of systems and strategies for establishing industry-institute interface.

It is important for the students of any institution to get a feel of the real world which is awaiting them beyond the premises of the campus. Hansraj College has been very conscientious in promoting a healthy culture of interaction between students and their fields of interest for the sake of their future. It already has in place mechanisms to facilitate industry-institute interface. The College has therefore been fortunate enough to produce some notable alumni, many of whom have yielded unparalleled performance in the industry. The Research Committee and the IQAC interact with the industry on a regular basis and invite eminent researchers from the industry for workshops, seminars and conferences. The Placement Committee has developed strong roots in the various layers of the industry which in turn has let the interface to be experienced by every unit of the college. Moreover, the students are trained in life-skills such as negotiations and entrepreneurship, as they talk to sponsors and prepare for their annual festivals: both for the college societies, as well as for the grand-scale participation at Antardhvani (University of Delhi, Annual Festival). This is the kind of application-based learning to which the entire teaching community of the institute feels deeply connected. Thus, through frequent speaker sessions, conferences, seminars, placements, internships, and the festivals of the various societies, the college engages in some intensely cerebral and immensely enjoyable experiences of mutual sharing of knowledge, skills and resources with the industry at every level of the pyramid.

#### 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

So far, there is no formal record of any such stated policy or of the ways by which expertise could be advocated and publicized. However, staff members and students are tirelessly motivated, enriched and driven to do that on personal front by the all prevailing magnetizing light of knowledge and wisdom flowing through the college premises. The college always acts as a facilitator to such consultancy endeavour of its faculty.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

The institute always encourages its faculty to participate as resource persons in workshops and seminars organized by the industry and to provide consultancy services in their areas of expertise. There is a plethora of areas of expertise available at Hansraj College, since it is a multi-disciplinary institute. In the recent past, there were many applications of Lab-to-Land by way of Innovation Projects undertaken by faculty which were widely publicized at the annual cultural festival, Antardhavani, of University of Delhi. Moreover, staff skills are not only advocated and publicized, but also honed by persistent invigoration to periodically upgrade their set of qualifications. In tune with these efforts of the faculties, IQAC has been set up to encourage the faculty to share their expertise and provide consultancy services.

**3.5.4 List the broad areas and major consultancy services provided by the institution and the revenues generated in the last 4 years.**

Hansraj College is a socially responsible institution and we encourage our faculty members to extend their assistance to the community beyond the college as well. Faculty members from different departments of the college have been providing consultancy to various institutions like NGOs, Ministries, other National and International Educational institutions, Selection Committees, Administrative Staff Colleges and Research Committees as well as Industry at individual level for several years, though not formally. Dr. Amit Sehgal, Dept. of Physics & Electronics developed a website (URL: <http://www.csakg.com>) on freelancer basis to provide advertising support to a Company Secretary firm. Our faculty members are also often invited as visiting and guest faculty to other institutes; we help in the paper setting and the curriculum development at the departmental level; we provide expertise in the capacity of resource persons and as part of the governing body of schools; many of us have had the privilege of being jury and mentors at workshops and conferences; and of being the supervisors for research students.

Though there does not exist a formal policy for revenue sharing, any revenue generated out of such endeavours is utilized to the extent of 10% for the College development.

**3.5.5 Policy of the institution in sharing the income generated by consultancy.**

The consultancy policies are in line with the policies of University of Delhi. Any income if generated through consultancy is utilized for the development of the institution. There is no formal policy for revenue sharing but a general guideline is that 10% is to be used for developmental activities of the institute.

**3.6 Extension Activities and Institutional Social Responsibility (ISR)****3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

The DAV vision of the college necessitates that our sense of responsibility extends beyond the walls of the campus. The following activities are conducted through societies/committees/cell in the college for the holistic development of the students into responsible citizens.



### National Service Scheme (NSS)

The National Service Scheme (NSS) unit of Hansraj College works in accordance with the ideals of selfless service towards the society. The idea that governs the working of the society is 'Not Me but You!', and of course the abiding ethic is that of service before self.

NSS works under four different wings that allow us to promote welfare and development in a plethora of fields, namely: ***Padhaku* (Education), Health, Rural Development and Environment and Disaster Management.**

### National Cadet Corps (NCC)

The National Cadet Corps (NCC) was established in the college in 1949 with only 45 cadets to impart training and officer like qualities to them such that they are always ready for the service of the country.

### *Haritima*

The Environment Awareness Society of the college, ***Haritima***, is a society with a mission to create awareness among students and public at large about various environmental threats and their consequences. It is run by the students of the college under the guidance of the competent teachers.

### *Enactus*

It is a non-profit organization that plans and implements business models with a socio-economic impact. The major projects of this organization include Project *Lekhni*, Project *Mithaas*, and Project *Boond*.

- **Project *Lekhni***

The project is an endeavour to empower under-privileged women by making them financially independent. Employment opportunities are sought to be created for women under this project. For instance, women from Jhandewalan area in Delhi were trained to earn their livelihood near their residence. Initiated in 2012, the project organised these women into a self-help group and they were provided with the knowledge of making spiral-bound registers. The project involved monitoring the progress of learners and a realization of their skills in the making of good quality registers ready for sale.

- **Project *Mithaas***

The project is an initiative by *Enactus* to promote bee-keeping as an alternate source of income among farmers. The project, in collaboration with National Bee Board (NBB) and Ministry of Agriculture, has successfully trained the farmers in UP and Haryana about the science behind bee-keeping. This initiative has received an enthusiastic response.

- **Project *Boond***

The aim of the project is to provide the underprivileged people, who cannot afford expensive water purifiers, access to clean drinking water by providing them water purifiers that run without electricity. The project aims to create access to safe drinking





water in the slums as well as generate employment opportunities for economically weaker sections of society.

### Women Development Cell (WDC):

The main aim of this cell is to create general awareness, gender sensitization and women empowerment among the students of the college by holding lectures, workshops and interactive sessions.

**Table 3.22: Details of Extension Activities carried out during last four years**

2014-15	
NSS	<ul style="list-style-type: none"> <li>• A series of events including awareness sessions, health check-ups, celebrations, visits to shelters and a very special initiative of celebrating the 'Love Week' this year onwards was undertaken by the society.</li> <li>• NSS celebrated Independence Day on 14<sup>th</sup> August 2014 and revived feelings of love and honour among the students and the teachers.</li> <li>• Teacher's Day was celebrated with eminent guests including Mr. Poonam Suri, Head of the DAV Committee. This gave the college the privilege of getting its newly constructed 'Yagyashala' inaugurated on the occasion.</li> <li>• People's Climate March organized from Mandi House to Jantar Mantar by NSS was an effective awareness campaign.</li> <li>• A series of events including plantation drives and cleanliness drives in and around the college premises strengthened the motive of NSS to spread awareness about the importance of cleanliness and hygiene.</li> <li>• A Diwali Mela was held showcasing colourful stalls and beautiful items made by NSS volunteers with the help of the creative team. These items were bought by students and college teachers to decorate their homes.</li> <li>• After the celebration of Universal Brotherhood Day, NSS initiated 'Love Week' in the first week of February from 2<sup>nd</sup> to 8<sup>th</sup> February 2015. Visits to old age homes, orphanages, blind school, rallies for the demand of 9% share of the union budget for the education of underprivileged children. Special greetings to non-teaching staff of the college marked the week-long celebrations to spread the message of love and fellow-feeling.</li> <li>• NSS Annual Fest 'Utsav 2015' was organized on 25<sup>th</sup> February 2015. The theme for the same was 'Bringing back Childhood' and the Chief Guest of the event was Mr. Trinath Mishra, Former Director CBI. Special events like karaoke, dance competition, logo quiz, bouncer questions, golgappa eating competition etc were the highlights of the fest.</li> <li>• The WDC organized a four day theater event in the college from 24<sup>th</sup>-27<sup>th</sup> March. Famous actors like Rakesh Bedi, Kashmira Shah, Nitish Bhardwaj and others presented their dramatic skills through skits and plays during the four day event.</li> </ul>
NCC	<ul style="list-style-type: none"> <li>• 10 Cadets participated in National Integration Camp organized by Khalsa College, Amritsar. The Delhi Directorate secured the 3<sup>rd</sup> rank.</li> <li>• 5 cadets completed the Special National Integration Camp organized by Jawahar Navodya Vidhyalya, Peddapuram Kakinada, Andhra Pradesh.</li> </ul>
HARITIMA	<ul style="list-style-type: none"> <li>• Session 2014-15 started with the Orientation Session of the society introducing students to the functioning and mission of the society. The session was followed by a plantation drive around University of Delhi, North Campus.</li> <li>• Students' competitions and a talk by Dr. B.C. Sabata, ex-director of Vigyan Prasar marked the World Ozone Day.</li> <li>• A cleanliness drive was conducted on 2<sup>nd</sup> October around the college to support</li> </ul>



	<p>the “Swachh Bharat Abhiyaan” which saw an active participation of both teachers and students.</p> <ul style="list-style-type: none"> <li>• On the occasion of Diwali, an anti-fire-cracker rally was organized to spread awareness among people to help create a pollution-free environment.</li> <li>• A lecture by eminent speakers from Posh Foundation was organized on the topic “Our Contribution for Stray Animals” which saw a huge participation of students and animal lovers from the college staff.</li> <li>• A drive for collaboration on waste-paper management was undertaken in collaboration with SRCC and Ramjas College.</li> <li>• The Society conducted its Annual Festival – Prakriti Kumbh 2015 on 24<sup>th</sup> March 2015. The theme of the festival was “Save Water” to mark the World Water Day on 22<sup>nd</sup> March. The keynote speakers for the inaugural ceremony were Dr. B.C. Sabata, Dr. U. Kakroo, and Dr. T.V. Venkatewaran. The festival involved various events such as Caption Writing, Debate (on the topic– “Should Water be Subsidized?”), Poster Making, Rangoli Making, Slogan Writing competition (titled “Add a Leaf”), making the Best out of Waste. Each event focused on the theme of conservation of water and creation of a pollution-free environment.</li> </ul>
ENACTUS	<ul style="list-style-type: none"> <li>• ENACTUS organized ‘The Entrepreneurship Summit’ with the objective of providing a platform for the exchange of ideas between the youth and entrepreneurial leaders. The Internship Fair at the summit was especially popular as it provided students with internship opportunities with various start- ups and NGOs.</li> </ul>
WDC	<ul style="list-style-type: none"> <li>• The opening event of Women Development Cell (WDC) started on the occasion of Independence Day (15<sup>th</sup> August). During the event the members of WDC visited Chandraval slums and interacted with the women living there. Their interaction emphasized the importance of seeking independence through the education.</li> <li>• On the occasion of Teachers’ Day, WDC organized the inauguration of Yagayashala in the presence of all D.A.V. Association’s delegates. The Yagayashala has been set up to promote the guidelines of D.A.V. Association’s way of living.</li> <li>• WDC conducted a seminar to highlight the importance of empowerment of women where the delegates shared their views and suggestions on the issue.</li> <li>• WDC organizes Self Defense classes for women regularly in the college. An instructor conducts these classes during the months of October to March. These sessions emphasize the need of self-defense and self-reliance among women.</li> <li>• A play titled “Draupadi” was organized in the college to discuss the status of women in society.</li> <li>• WDC organized events to mark the Republic Day and the birthdays of Swami Vivekanand and Subash Chandra Bose from 26<sup>th</sup> February onwards.</li> <li>• Women’s role in society was celebrated on the International Women’s Day on 8<sup>th</sup> March. Posters with quotes from leading thinkers on the theme were displayed on college walls.</li> </ul>
<b>2013-14</b>	
NSS	<ul style="list-style-type: none"> <li>• NSS Hansraj College touched new heights of success and glory during the academic session 2013-14. The idea of contributing a designated amount of hours for the work was introduced which helped in a more efficient implementation of the projects undertaken. The team was divided into 5 units, namely: The Education Unit; The Disaster Management Unit; The Rural Development Wing; The Health Department and The Environment Unit. The 200+ member team worked efficiently to make this unit a huge success.</li> <li>• Following is a list of activities which the team undertook in this session:</li> </ul>





	<ul style="list-style-type: none"> <li>• The volunteers tutored children from economically weaker sections of society after their college hours to help them with their studies. They organized visits to National Museum and other educational institutions to enhance their general awareness.</li> <li>• Teachers' Day as well as Children's Day were celebrated to make studies a fun activity for children.</li> <li>• A movie screening session was also organized for the children informing them about events around Indian Independence.</li> <li>• The biggest achievement of 'Padhaku' was the academic success of a girl named Pratima from among the group of children taught under the project. She secured the first position in her school.</li> <li>• Two blood donation camps were organized in the college in association with Blood Connect. Doctors from All India Institute of Medical Sciences conducted the camp. More than 150 donors came to both the camps.</li> <li>• NSS also launched the Pink Chain Campaign that aimed at spreading awareness regarding Breast and Cervical Cancer. Dr. Abhishek Shankar from AIIMS led this campaign and was the key speaker during the seminar. A 20-minute documentary on women suffering from breast cancer was also screened in the college.</li> <li>• In order to ensure the health of the female students of the college a free health check-up was organized in association with Johnson and Johnson. It was a huge success.</li> <li>• A drive 'Hills are Safe' was organized by the team where the unit helped revive tourism in Uttarakhand after the 2013 summer mishap. Also, a street play and mock drill was organized where ways tackling disasters in an innovative manner were discussed by the team.</li> <li>• The Rural Development Wing of NSS Hansraj College organized an election awareness (SVEEP) drive in association with the Society of General Awareness of the college raise to awareness about the Delhi Assembly elections. Awareness was spread through a slogan and tagline writing competition in which the students participated in large numbers.</li> <li>• The Rural development wing has also been responsible for conducting collection camps in college. The collected material was donated to an orphanage at Kashmiri Gate called Kilkari.</li> <li>• In its efforts towards improving the life of people, the Rural development branch also launched a new programme named 'Sangini' in which it conducted seminars for poor women regarding Health and Hygiene and many others topics of everyday relevance. Empathizing with the homeless street dwellers during winters, this branch distributed shawls among the poor and handicapped near Hanuman Temple on Chattra Marg.</li> <li>• The unit organized regular cleanliness and plantation drives in college and helped in making Hansraj College a cleaner and greener place.</li> </ul>
NCC	<ul style="list-style-type: none"> <li>• 90 NCC cadets actively participated in different NCC camps/ activities under the command of S.U.O Vishak Antil, JUO Manjeet Yadav, JUO Upender Rohilla, JUO Rajnesh Kumar, JUO Pulkit Singh and JUO Sachin Rohilla.</li> <li>• A team from the college won the Kabaddi competition and was applauded for its good performance in various events like drill competition, volley ball and tug of war.</li> <li>• 11 cadets of the college successfully completed a 15-day Army Attachment Camp (National Camp) held at Meerut Cantt under the command of JUO Manjeet Yadav. The college was adjudged the best disciplined college in the camp.</li> </ul>



	<ul style="list-style-type: none"> <li>• 37 newly enrolled cadets successfully completed the Annual Training Camp held at Paschim Vihar for 10 days under the command of SUO Vishal Antill.</li> <li>• 14 cadets appeared for 'C' certificate exam during this session.</li> </ul>
HARITIMA	<ul style="list-style-type: none"> <li>• The activities commenced by distributing pamphlets bearing handy tips to save the environment all over the North Campus to mark World Environment Day on 5th June 2013.</li> <li>• The beginning of the new session was celebrated by organizing a Plantation drive in the college campus on 22nd July 2013.</li> <li>• <i>Haritima</i> began its new session by holding an orientation for new students to introduce them to the vision of <i>Haritima</i>.</li> <li>• <i>Haritima</i> got 10 new dustbins installed in the college premises and organized a cleanliness drive on 5th September 2013.</li> <li>• World Ozone day was celebrated in collaboration with Ministry of Earth Sciences on 16th September 2013. On this day a panel discussion on "Ozone Depletion and its Impact on our day to day Life" was held.</li> <li>• A seminar on E-Waste Management along with a collection drive for E-Waste was organized on 4th February 2014 with the help of E-Parisar.</li> <li>• The Annual Festival 'Prakriti Kumbh' was organized with the help of Millennium India Education Foundation on 28<sup>th</sup> February 2014 to mark the National Science Day. Around 250 students and 7 colleges participated in various activities held.</li> </ul>
ENACTUS	<ul style="list-style-type: none"> <li>• Having won the Wal-Mart grant for women empowerment, ENACTUS continued with project <i>Swaad</i> that dealt with the production of breakfast items by small scale tiffin service providers around the North Campus, University of Delhi. The aim was to provide them with a stable income and improve their business skills that had been previously lacking.</li> <li>• Project <i>Lekhni</i> promoted the sale of customized spiral bound notebooks made by underprivileged women with no alternate source of income. The spiral bound registers have now become a source of income for these women.</li> <li>• The highly successful Entrepreneurship Summit 2014 acquainted the students with the fundamental concepts of Entrepreneurship and offered a dynamic platform for healthy exchange of ideas between veterans in the field and the young students. The internship fair that the summit organized provided opportunities for internships with about 40 companies to the students.</li> </ul>
WDC	<ul style="list-style-type: none"> <li>• The academic session 2013-14 was inaugurated on 24<sup>th</sup> September 2013. Dr. T. V. Venkateswaran, Academic Head-Vigyan Prasar, New Delhi, was invited to deliver a talk on "Women's Empowerment &amp; Knowledge Management" where he highlighted the current status of women in positions of responsibility in India.</li> <li>• The committee had formal and informal discussions with a cross section of female students and faculty members in order to improve the facilities available to women in the college. In response to the suggestions of the committee to the principal, a Medical Room was opened and a female nurse appointed for the same during the academic year.</li> <li>• Self-Defense classes were also organized by the college for girl students.</li> <li>• Another event was organized on 24<sup>th</sup> February 2014 wherein the renowned women activist Ms. Kavita Krishnan, Secretary 'All India Progressive Women Association' delivered a spirited talk on 'Gender Sensitization'. Students had a zealous interactive session with the speaker and other faculty members. Poster making and slogan-writing competitions on the topics 'Women Empowerment' and 'Gender Sensitization', were held for the students and prizes were given to the winners by the Principal and the Guest, Ms. Kavita Krishnan.</li> </ul>
2012-13	



NSS	<ul style="list-style-type: none"> <li>NSS Hansraj College started the academic year with the motto of serving society by all possible means. This year a large number of students turned up for its orientation held in August. Many first year students enrolled with NSS and joined the already active core group to offer their selfless service in various capacities for better running of some flagship programmes, NSS Hansraj is involved with.</li> <li><i>Padhaku</i>: NSS enrolled 146 underprivileged students from several localities and over 80 volunteers acted as their mentors cum guide and taught them after college hours.</li> <li><i>Vitrann</i>: Under this project various voluntary donation camps were held in the college. Books, toys, clothes and other stuff were collected and later distributed in areas around Malka Ganj, especially in Night shelters and orphanages.</li> <li>This year college was successful in organizing two Blood Donation Camps with the motto that each drop counts and could save lives of those in need of blood. The first camp was organized with AIIMS Trauma Centre, New Delhi and second one was organized with AIIMS Hospital, New Delhi. 154 persons donated blood. The camps were organized in collaboration with Blood Connect and Sapna, an NGO.</li> <li>Universal Brotherhood Day is one of the most celebrated events of NSS in the college. The event was held in September, 2012. Over 500 people gathered to participate in the same.</li> <li>Cleanliness drives, Teacher's Day Celebrations along with <i>Padhaku</i> children, Diwali Fest and other one day events kept the NSS engaged throughout the academic session.</li> <li><i>Padhaku</i> kids were taken on a one-day excursion to Humayun's Tomb and Nehru Planetarium. The excursion was blend of education and entertainment.</li> <li>UNICEF launched a campaign 'Nurture trees, Nurture lives' from the college on 24<sup>th</sup> February, 2013. This was to mark the eradication of Polio from India. Suresh Raina from the Indian Cricket Squad and representatives from UNICEF, Adani Group and Aid Matrix graced the occasion. Louis George Arsenault, the country representative of UNICEF, and others shared their views on the occasion. Utsav'13, the largest event of NSS was an amalgamation of various events.</li> </ul>
NCC	<ul style="list-style-type: none"> <li>100 NCC cadets actively participated in different NCC camps/ activities under the command of SUO Alok Kumar Tripathi, JUO Harinder Kumar, JUO Ramesh Vasisth, and JUO Saleem Saif.</li> <li>Anand and Prabhat from the college were part of the PM Rally para-sailing and para-slithering team held on 27<sup>th</sup> Jan, 2013.</li> <li>26 cadets from the college appeared for 'B' certificate exam and 13 cadets appeared for 'C' certificate exam.</li> </ul>
ENACTUS	<ul style="list-style-type: none"> <li>ENACTUS, Hansraj Unit was formally recognized and registered in the college with the consent of the Staff Council in the month of September 2012. The final team of ENACTUS had 25 members from Arts and Science departments.</li> <li>The Projects that were initially taken up by the team were: <i>Mithaas</i> (Honey Collection Project) and <i>Swaad</i> (Home-made snacks).</li> </ul>
<b>2011-12</b>	
NSS	<ul style="list-style-type: none"> <li>'<i>Vitrann</i>' volunteers did the remarkable work of collecting clothes, toys and other essential items by organizing <i>Vitrann</i> Camps at regular intervals and donated these to the poor and those in need. Old age homes, orphanages and relief camps were visited by the <i>Vitrann</i> head and other volunteers. A part of the collected material was handed over to Goonj (an NGO) for distribution in other areas.</li> <li>NSS carried out a plantation drive in and around the campus in September which was followed by a Pest control drive to eradicate mosquitoes and other harmful</li> </ul>



	<p>insects during the rainy season. The pest control was supported by Rallis India (a TATA enterprise).</p> <ul style="list-style-type: none"> <li>• NSS celebrated 'Universal Brotherhood Day' in association with Vivekananda Foundation on 18<sup>th</sup> September 2011. Mr. Ajit Doval, Ex. Director, IB, delivered a talk on 'Youth, Humanity and Brotherhood'.</li> <li>• A blood donation camp was conducted in association with the Armed Forces Transfusion Centre in the college badminton hall. 100 students did a wonderful service to the nation by donating blood for army men. Mr. Vivek (Director, Gandhi Fellowships) talked about social service and its importance amongst the youth and Mr. Rakesh Goel of Delhi Legal Cell delivered a talk on Anti-Ragging laws on the occasion. A documentary titled "Taxi to the dark side" was also screened.</li> <li>• NSS 'Utsav' celebrated the festive spirit of Holi by organizing various colorful events such as painting competition, art competition (Rang Utsav) and kite flying competitions. The event was unique in the sense that it celebrated Indian ethos, culture, patriotism and unity in diversity which are founding principles of college NSS.</li> <li>• NSS also organized a blood donation camp in association with AIIMS on 22 March, 2012.</li> </ul>
NCC	<ul style="list-style-type: none"> <li>• 100 cadets actively participated in different NCC activities and camps such as Annual Training Camp, Shooting Camp, Thal-Sainik Camp, Army Attachment Camp, National Integration Camp, Pre-Republic Day Camp, Parasailing Camp, Slithering CaDr.e Camp, Commando Training Camp and Prime Minister Rally.</li> <li>• The Annual Training Camp was held from 11<sup>th</sup> June to 20<sup>th</sup> June at Jaffarpur Kalan. The cadets attended this camp under the command of cadet SUO Anubhav Singh.</li> <li>• Another Annual Training Camp was held from 27<sup>th</sup> December to 5<sup>th</sup> January at Kerala (New Delhi). 35 Cadets attended this camp under the command of cadet SUO Deepak Singh, JUO Abunbhav Singh, Ramesh Vashisth, Harinder Kumar, Aok Pandey etc. took part in number of activities of the camp.</li> <li>• The Commando Training Camp was organized at Kirti Nagar (New Delhi) from 1<sup>st</sup> November to 18<sup>th</sup> November, 12<sup>th</sup> December to 23<sup>rd</sup> December and 26<sup>th</sup> December to 6<sup>th</sup> January. Two cadets, Ramesh Vashisth and Harinder Kumar successfully participated in this camp.</li> </ul>

### 3.6.2. What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?

- The track of awards received by the students is maintained at the departmental level and collated in the annual report of the college.
- The Students' Council also takes care of the records of students' involvement in various activities.

### 3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

Feedback link is provided in the college website where the stakeholders can put forward their perception about the different activities and the overall performance and quality of the institution.



**3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

*Table 3.23: Details of the Budget utilised for extension programmes*

Extension Activity	Budgetary Details
ENACTUS	This unit gets no funds from the college. It gets its funding from outside based on its projects.
NSS	This unit gets the fund of Rs. 35,000/- approx. per annum from the college.

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC and other National/ International agencies?**

- The NSS Unit plays a major role in ensuring active participation of students and faculty in the activities organized by circulating posters in the college campus.
- Workshops are conducted to spread awareness about the various events.
- NCC provides the cadets with an opportunity to take part in various camps in the country.

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

The *Padhaku* wing under NSS unit teaches school children from under-privileged sections from adjoining slum areas and provides them with free tutorials. 60-70 student volunteers conduct classes in the college premises for 6 days a week, beyond the college hours. One of the slum child mentored by *Padhaku* team stood first in her school. Visits have also been organized for these children to places of historical importance like Humayun's Tomb.

**3.6.7. Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

- The primary objective of the college is to ensure promotion of the concept of responsible citizenship. The college focuses not only on producing scholars but also creates an environment so that the students can evolve as better human beings. Each student passing out of the college develops as a responsible citizen contributing towards the development of the society.
- The college organizes various programmes, seminars and workshops for a holistic development of the students.
- Various extension activities are carried out under the NSS unit such as Blood donation camps, tutorials for children from adjoining slums, and plantation drives to enhance a sense of responsibility towards society and environment in every student.





### 3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

For details please refer to **Section 3.1.10**.

### 3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

- The Commerce Society organized the relief collection drive for the victims of Jammu and Kashmir flood in collaboration with University of Delhi students for J&K Flood Relief. The drive was organized in collaboration with DCAC and St. Stephen's College.
- In association with Kashmir Foundation for Social Change, Hansraj College managed to collect an amount of Rs.1,30,000/-.
- Keeping in mind the college's social responsibilities, the Commerce Society organized a Social Event- 'Spreading Smiles' in association with Teach for India. Through this event the underprivileged children were invited to different events and activities were organized for them.
- As a part of the *MITHAAS* project, a sustained interaction was carried out with the farmers and they were imparted practical training sessions over seven days in collaboration with the Ministry of Agriculture. This initiative significantly helped them in their beekeeping activities.

### 3.6.10 Give details of awards received by the institution for extension activities and/ contributions to the social/community development during the last four years.

- Eleven cadets of the college successfully completed a 15-day Army Attachment Camp (National Camp) held at Meerut Cantt. under the command of JUO Manjeet Yadav. The college was adjudged the **best disciplined college** in the camp.
- Rohan Rai, Economics (Hons.) III Year of NSS was awarded by Blood Connect and many organizations for being the youngest donor with maximum blood donations in the year 2014.
- Delhi Police awarded 2<sup>nd</sup> Prize to Hansraj College Dramatics Society for their play on sensitizing people towards women's issues in 2015.
- Students of NSS won 2<sup>nd</sup> Prize for their on board project (Gyanuday Express) awarded by the University of Delhi 2012.
- Seven Hansraj College students were selected to participate in International SPIC MACAY convention in Mumbai this year (2015).

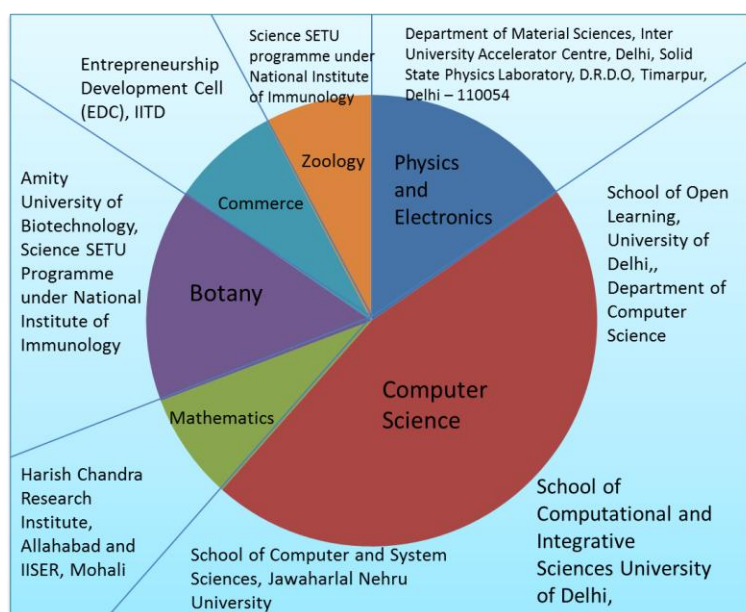
## 3.7 Collaboration

### 3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

The **Table 3.24** and **Figure 3.4** give the number and associations of department-wise collaborative activities.

**Table 3.24: Number of Collaborations**

Department	Collaborations
Physics and Electronics	2
Computer Science	6
Commerce	1
Botany	2
Zoology	1
Mathematics	1

**Fig. 3.4: Collaborations**

The institution works in collaboration with several laboratories and institutes for research activities. The details are given in table 3.25.

**Table 3.25: Details of the Research Collaborations**

S.N.	Department	Details
1	Physics & Electronics	Department of Material Sciences, Inter University Accelerator Centre, Delhi, Solid State Physics Laboratory, D.R.D.O, Timarpur, Delhi – 110054
2	Commerce	Entrepreneurship Development Cell (EDC), IITD
3	Botany	Amity University of Biotechnology, Science SETU Programme under National Institute of Immunology
4	Zoology	Science SETU programme under National Institute of Immunology
5	Mathematics	Harish Chandra Research Institute, Allahabad and IISER, Mohali
6	Computer Science	School of Open Learning, University of Delhi, Department of Computer Science, School of Computational and Integrative Sciences University of Delhi, School of Computer and System Sciences, Jawaharlal Nehru University



**3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.**

- The Commerce Society signed a Memorandum of Understanding (MOU) with Entrepreneurship Development Cell (EDC), IITD, for a possible association with the same. The kind of association with EDC, IITD that has been envisioned is based on mutual trust and agreement. The MOU has been drafted so as to have certain ground rules that both parties must abide by.
- The college has signed an MOU with NII (National Institute of Immunology) for a programme called Science *SETU* Programme.
- The college is also planning to work in collaboration with NIPG.
- The Commerce society organized a relief collection drive for the survivors of Jammu and Kashmir flood in collaboration with University of Delhi Students for J&K Flood Relief. The drive was organized in collaboration with DCAC and St. Stephens' College.
- In association with Kashmir Foundation for Social Change, Hansraj College managed to collect an amount of Rs.1,30,000/-
- Keeping in mind the college's social responsibilities, the Commerce society organized a Social Event- 'Spreading Smiles' in association with Teach for India. Through this event underprivileged children were invited to the different events and activities organized for them.
- Under the *MITHAS* project, sustained interaction was carried out with farmers and they were imparted practical training sessions over seven days in collaboration with the Ministry of Agriculture. This project contributed significantly towards their success in beekeeping activities.

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.**

- The institution took the initiative to build an auditorium in the college campus which was sponsored by the Alumni Association of the college.
- The college has successfully organized a number of Research Oriented events under the aegis of the DBT (Department of Biotechnology) sponsored programme. (For details, please refer to Section 3.3.3)

**3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

Detailed in Section 3.1.8



### **3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated?**

- The Commerce Society signed a Memorandum of Understanding (MOU) with Entrepreneurship Development Cell (EDC), IITD, for a possible association with the same. The kind of association with EDC, IITD that has been envisioned is based on mutual trust and agreement. The MOU has been drafted so as to have certain ground rules that both parties must abide by.
- The college has a formal MOU with National Institute of Immunology. The Science *SETU* Programme is a part of this initiative.

### **3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.**

The college has MOUs signed with various laboratories and institutes like NII and Entrepreneurship Development Cell (EDC). Science *SETU* Programme has been initiated in collaboration with National Institute of Immunology.

The Internal Quality Assurance Cell (IQAC) has been set up to review the functioning of these collaborations and maintain a record of their partnerships. New measures would be undertaken on the feedback generated over time.

**Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

**None**



## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

#### **4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

The infrastructural policy of Hansraj College is to have a resourceful differently abled friendly physical infrastructure that is well endowed with information-technology, having high standards of maintenance to provide quality education and an inclusive teaching-learning experience to its faculty and students. In keeping with the college's commitment for providing education that enhances all round personality development of the students, the college attempts to create infrastructure that facilitates growth in terms of physical fitness, extra-curricular interests and mental well-being. The aesthetically landscaped campus with its extensive green cover provides a conducive environment for teaching learning.

#### **4.1.2 Detail the facilities available for**

##### **a) Curricular and co-curricular activities**

<b>S. No.</b>	<b>Facilities</b>	<b>Details</b>
1.	Building Infrastructure	Existing Facilities: <ul style="list-style-type: none"> <li>• Administrative Block</li> <li>• Audio Visual Room</li> <li>• Classrooms: 42 in number</li> <li>• Library</li> <li>• Multi-purpose hall</li> <li>• Sports Ground</li> <li>• Teaching Block</li> <li>• Tutorial Rooms: 42 in number</li> <li>• Seminar Hall</li> <li>• Departmental Rooms</li> <li>• Common Room for students</li> <li>• Facilities for differently abled</li> </ul>
2.	Information Technology and Interactive Teaching Facilities	<ul style="list-style-type: none"> <li>• Advanced academic software – MATLAB, Mathematica, WAMP</li> <li>• Class rooms equipped with LCD projectors: 25 in number</li> <li>• Computers for academic purposes: 152 in number</li> <li>• Mobile LCD projectors: 2 in number</li> </ul>
3.	Botanical Garden	The college has a well-maintained botanical garden that harbours close to 100 species of wild and cultivated plants. There is also a pond for cultivation and maintenance of hydrophytic plants. A fern house for maintaining various ferns growing in and around Delhi. Garden also caters to day to day need of the laboratory requirements.
4.	Animal House	The college was having a well-maintained animal house to cater to the need of Zoology and Life Sciences. As per the UGC notification dated 5/8/2014 banning the dissection of animals at undergraduate and post graduate level, the facility has been rendered non-functional.

**b) Extra –curricular activities**

The college gives equal emphasis to co-curricular activities seeing them as part of the students' growth. The college has among its alumni, many internationally famous luminaries. There are various societies in the college including dramatics, debating, music, dance, NSS and various others providing great platforms to students with extra talents.

To maintain the tradition the college provides various facilities and spaces:

1. A spacious air conditioned auditorium with the best of sound and light systems giving opportunities for holding variety of events
2. A seminar room
3. A yoga room for yoga/recreation activities
4. A fully functional Amphitheatre providing an acoustically vibrant performance space for various kinds of activities.

Various facilities available in Department of Physical Education are as follows:

- Archery Training Area with Equipments.
- Indoor Wooden Badminton Hall (Dimensions: 18.40mts x 12.15mts x 8.20mts)
- One concrete Basketball Court with uprights / Fiber Boards
- Play Field (Dimensions: 140mts x 100mts) with Centre Cricket Pitch and Football uprights
- Indoor 10mts Shooting Range with 06 lanes
- Volleyball Court with Uprights , one, standard size
- Sports Room (Dimensions: 6.50mts x 4.30mts)
- Sports Store Room (Dimensions: 6.50mts x 6.50mts)

**4.1.3 How does the institution plan and ensure that the available in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).**

HRC has a well-planned infrastructure ensuring good utilization of premises for its academic growth. It has a large academic block hosting big and spacious classrooms, tutorial rooms and laboratories. There is a huge library equipped with several books for each of the departments and literature that dates back to early 1900s. There are few separate libraries as well for certain departments. (Hard Copy of master plan is available.)

With an inherent urge to continuously rise higher in the academic standards as well as other areas, college also has future plans in terms of utilizing the available space even more efficiently. Some of the immediate ones include formation of an academic research block to promote research work in the college. This block will provide a separate area to all the faculty and students to carry out the research work. College also plans to open a media center that will provide opportunities to faculty and staff to use technology in an effective way. These opportunities include providing multimedia support for classes and maintenance of resources. College also aims to fully automate the library functions and make the attendance system online.



College plans to build a girls hostel to provide accommodation facilities to girl students. It also intends to open a squash court and a swimming pool to promote sports activities.

### **4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

HRC has a specialized unit, Enabling Unit for meeting the needs of students with physical disabilities. Please refer to section 2.2.1 for details.

### **4.1.5 Give details on the residential facility and various provisions available within them:**

- **Accommodation**  
HRC has a boys' hostel having a capacity to accommodate 200 residents. The hostel has 128 rooms out of which 59 are single seaters, 8 are dormitories and the rest are given on twin sharing basis. There are separate rooms for office, warden office and 2 rooms for visitors.
- **Recreational Facilities**  
Hostel facilitates recreation by providing a table tennis table and a badminton court. It has also got a common room with television available to students. The common room also serves newspapers and magazines to facilitate reading.
- **Computer Facilities**  
Hostel is covered with 24-hour Wi-Fi facility. There is a computer room with 4 computers available for use to the students during office hours.
- **Facilities for Medical Emergencies**  
Hostel maintains a first aid box with all the necessary first aid and medicines to handle medical emergencies. Students also have the provision to become member of WUS Health Center at an affordable cost and avail free medical services.
- **Internet and Wi-Fi facilities**  
Hostel WiFi is available in all the rooms. Internet enabled computers are available in the computer room of the hostel.
- **Safe Drinking Water**  
The hostel has got 3 R.O. Systems and 2 water coolers (one on each floor) providing 24 hour supply of safe drinking water.
- **Security**  
The hostel ensures 24 hours security and safety of the residents. There are 17 CCTV cameras installed in the hostel providing full coverage of all areas.
- **Residential facility for college staff**  
There are residential facilities for teaching, non-teaching and hostel staff available on campus. There are three residential blocks for teaching staff with a total of 24 flats and 27 for non-teaching staff. All staff accommodations are fully secured with CCTV cameras.

**4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

College has a large green cover with well-maintained trees which contribute in building a pollution free environment in the premises. There are regular yoga classes held for staff members to promote a healthy lifestyle. College has a medical room with all the necessary first aid and a mobile stretcher. A nurse has also been appointed for providing proper first aid during emergencies. Hansraj is well connected to a hospital which is within 500m of its main gate.

**4.1.7 Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

Hansraj College has a Grievance Redressal Unit, Women’s Cell and a Placement Unit for ensuring proper functioning of the college, women empowerment and industry exposure of students.

Hansraj College has a well set up medical room with mobile stretcher, wheel chair and all the necessary first aid available. Also, college is well connected to a hospital. College ensures clean and hygienic canteen premises offering a variety of preparations. It has installed water purification systems at multiple points for providing safe drinking water throughout the campus. Microwave oven is available in the staff room. It has good space like yoga room and sports room (with various indoor games) for recreational activities. College hosts an acoustically designed auditorium with the best of light and sound systems.

**4.2 Library as a Learning Resource****4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?**

Yes, we have library advisory committee known as library committee and the head of the committee known as library convener. The committee members are the teachers in charge of different departments. Most of the recommendation for books, budget and other decisions are taken by the library committee.

In the process of collection and development the library committee plays a vital role:-

- Acquisition of books and journals
- Subject wise budget allocation
- Evaluation of current periodicals and journals and review the subscription of new journals
- Stock verification once in every year
- Weeding out of books
- Special facility to VI and PH category students
- Feedback and suggestion from the users.



#### 4.2.2 Provide details of the following:

- Total Seating Capacity includes different section of the library i.e. 260 persons approx. (Text book section-109, periodical section 27, Computer Lab-16 and Reference section -8)
- Working hours :-  
Working days – 08:00 am to 05:00 pm  
On Holidays – 09:00am to 04:00pm  
Before and during Examination – 08:00 am to 08:00 pm
- Layout comprises of 5 important sections i.e.  
**Reference Section** – it is located on the ground floor of the library which includes the huge collection of encyclopedias, yearbooks maps, atlases and dictionaries.  
 The Library has huge Stack Hall located on the ground floor and this ground floor also has circulation desk for smooth Circulation (issue and return) process.  
 Property counter is also located at the entrance of the Library.  
**Text Book Section**- it is situated on the first floor of the library premises and has seating capacity of 110 students, it has its own circulation section.  
**Department Libraries (Science)**– college hosts separate department libraries as well for certain science courses like Botany, Physics and Electronics, Chemistry and Zoology. These dedicated libraries help in saving the time and effort of the faculty and students.  
**Department Library (General)**-situated at first floor, it also has its own Circulation Process including the books of Arts and Commerce.  
**Periodical Section** – located at first floor, this section is specifically meant for the magazines, newspapers and journals. This place also has seating arrangement for 27 users at a time.  
**Internet Access Lab** – the internet access Lab is located at first floor and has seating capacity for 16 students at a time. The facility of printing, downloading and savings data is provided by this lab.

#### 4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Purchase of reading materials in the library is ensured as the demands placed by students and teachers and as per allocation of funds discussed in Library Committee.

Usually Faculty members select the titles of books and procurement is made by the librarian. The librarian also consult publishers catalogue to check the recent publications.

*Table 4.1: Details of Number of Books Purchased in Last Four Years*

Library Holdings	Year 2011-2012		Year 2012 -2013		Year 2013-2014		Year 2014-2015	
	Number of Books	Total Cost	Number of Books	Total Cost	No. of Books	Total cost	No. of Books	Total cost
Text Books and Reference Books	2,459	10,80,396	2,421	10,36,003	2,030	9,30,548	2,013	9,90,002
Journals and other Periodicals	99,086		1,14,867		1,32,697		1,46,654	



**4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?**

- OPAC – this is college’s library software which is being used for the maintenance of records and searching of catalogue
- Library Automation – the process is going on for automation but it is not yet completed
- 16 computers have been installed for public access in the computer lab of the Library
- Total number of Printers - 2
- Internet bandwidth - 10mbps

**4.2.5 Provide details on the following items:**

- Average number of walk-ins – 1200 Approx.
- Average number of books issued /returned – 2000 Approx.
- Library books to users - Ratio is 30:1
- Approximately during last three years 8,000 books have been added to the Library collection.
- Weeding out of Magazines and newspapers happens once in a year i.e in the month of June and for the books it is 5,381 Approx. during last 5 years.

**4.2.6 Give details of the specialized services provided by the library**

- Reference service – we have a good collection of reference materials which includes encyclopedias, maps & atlases, dictionaries, yearbooks etc. which can be accessed by the staff and students.
- Reprography–yes, we have reprography in the college campus.
- Download – yes, the users can download the required material.
- Assistance – yes, the staff provide assistance in searching OPAC Database.

**4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

The Library Staff is supportive in providing information which includes searching books/material on the OPAC. i.e. on the library software and finding these documents on the shelves as well. As the collection of library is located at different places which consists of Stack, Text Book Section, Department and Reference section, with the help of software (Troodon) the location can be identified and the Staff provide due assistance in searching these documents.

**4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.**

Yes, we do provide Laptops and i-Pods to VI and PH category of students and we have collection of Braille books as well. The number of i-Pod issued to Students under this category is 10 and the Laptops are 26.



#### 4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)

We have a Suggestion Box in the Library premises which invites suggestions and complaints from the users about the services and facilities of the library. If these feedbacks are found valuable we make recommendations in the library committee.

Students are also asked to make suggestions to teachers in their departments for improvement of library services. These are then communicated to the Library committee via the teachers in charge.

### 4.3 IT Infrastructure

#### 4.3.1 Give details on the computing facility available (hardware and software) at the institution.

Hansraj College has an efficient IT infrastructure with ICT enabled labs and latest technology hardware and software.

**Table 4.2: Lab-wise details of PC Units available in Computer Science Department**

LAB NO	PC CONFIGURATION	DATE OF PURCHASE	NO. OF PC UNITS
LAB-01	HP COMPAQ DX2480 WITH 18.5" TFT INTEL CORE 2 DUO E7500 2.93GHz 2GB RAM 320 GB HDD	28-09-2009	10
LAB-02	LENOVO THINKCENTRE DESKTOP WITH 17" TFT INTEL CORE 2 DUO 2.4GHz 1GB RAM 160 GB HDD	27/11/2008	13
LAB-03	IBM THINKCENTRE INTEL P-IV 2.40GHz 128 MB RAM 40 GB HDD	11/02/2005	05
	IBM NETVISTA INTEL P-IV 1.80 GHz 128 MB RAM 40 GB HDD	13/04/2003	04
	IBM THINKCENTRE INTEL P-IV 2.66 GHz 256 MB RAM 40 GB HDD	19/12/2005	02
LAB-04	IBM THINKCENTRE DESKTOP WITH 15" MONITOR(A-52) INTEL P-IV 945, 256 MB RAM 80GB HDD	5/08/2006	38
NCL1& NCL2	80 COMPUTERS (AMD POCESSOR 2.6Ghz, 2 GB RAM, 250 GB HDD, 32 Bit) ACCER 1231 LAPTOPS for students, 26 LAPTOPS for teachers	Provided by University of Delhi 2010	80
College office	2 SERVERS WITH 10 CLIENT PCs	2013	10

**TOTAL NO OF LAPTOPS -1257**

**TOTAL NO OF SERVER: 2**

**Computer-student ratio**

College has 157 computer systems which amounts to a 1:1 computer student ratio in any ongoing class.

**Standalone facility**

Yes, there is standalone facility

**LAN facility**

LAN facility is available in the college in all computer labs, library and staff rooms.

**WiFi facility**

College premises are covered with a high speed wi-fi network available for use to all the faculty and students.

**Licensed software**

College uses licensed softwares available on the university website.

**Number of nodes/ computers with Internet facility**

All the computers in the college are equipped with internet facility.

**4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?**

Computer and internet facility made available to the faculty and students on the campus and off-campus. There are 157 desktop systems available to both teachers and students. All the desktop systems have internet facility. University of Delhi has also provided with 26 laptops for teachers and 1231 laptops for students. College wide WiFi is available for use by both staff and students.

**4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

HRC takes profound initiatives to provide latest technology to students thus benefitting them in keeping up with the pace of modernizing IT world. It provides access to well equipped labs with good configuration hardware and all the required software. The labs and rooms have projectors which facilitates the teaching/ learning process. The auditorium and seminar hall also have all the necessary ICT equipments to facilitate organization of large scale workshops.

**4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

Following are the details of the internal fund for procurement, upgradation, deployment and maintenance of the computers and their accessories

Year	2011-12	2012-13	2013-14	2014-15
Fund (In Rs.)	189000	207500	220500	224858

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

The institution provides access to desktop systems and laptops to both teachers and students which helps them build and explore knowledge through computer aid. Learning becomes much more comprehensive when combined with visualizations in the form of presentations and other multimedia. Students are encouraged to attend workshops held by various departments teaching them the use of latest technologies.

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

To make the learning process more effective various means are deployed by the teachers. This includes creating online groups where students can discuss and explore their knowledge. The use of projectors help students visualize things better. Internet facility provided to students give them access to large amount of learning material available on the web.

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

The institution avails the National Knowledge connectivity through the affiliating university, University of Delhi. The official university website contains licensed access to most of the softwares required by the course curriculums.

**4.4 Maintenance of Campus Facilities****4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

*Table 4.3: Details of budget allocated during last four years (in INR):*

Heads	2013-14	2012-13	2011-12	2010-11
Building	4060175	1770219	3044433	1737380
Furniture	39204	1255365	2965206	145310
Equipment	10391534	250700	675973	628750
Vehicles	376731	443214	521425	613445
Vehicles Insurance	5117	5628	8829	12740



### **4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

Hansraj College ensures proper upkeep of its infrastructure, facilities and equipments by carrying out periodic maintenance drives. The teaching and tutorial rooms are regularly cleaned. College takes great care to ensure hygiene for its staff and students by providing safe drinking water, clean canteen premises and regular cleaning of washrooms. College's inherent tendency to maintain clean and green in a way automatically contributes to maintenance of a healthy infrastructure and environment. There are caretakers and gardeners appointed for the same.

### **4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?**

The laboratories are updated with latest technology instruments. It is regularly ensured that all the labs are equipped with sufficient resources to cater to various needs of the students.

### **4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- Deployment of power generators
- UPS enabled computer systems to handle voltage fluctuations
- Employment of reverse osmosis systems in both college and hostel premises



## CRITERION V: STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Mentoring and Support

#### 5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Prospectus is published by the institution on an annual basis. The prospectus provides detailed information on various aspects. Some of the important points are:

- Admission procedure along with its requirements
- List of the departments and courses offered
- Fees structure for various courses
- Facilities and features
- Rules regarding attendance, ragging, discipline, etc
- The staff council and its committees like Admission Committee, Grievance Committee, Women's Development Committee, Sports Committee etc.
- The academic calendar provided by the university is included in the prospectus and the college adheres to all the provided timelines

The prospectus is put up on the college website and is printed as well.

#### 5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time.

Teachers and Governing Body donate money to contribute for prizes and scholarships. The interest gained is used for scholarships. These scholarships are based on specific criterions. Merit and need based Scholarships are given by the college. The Student Welfare Committee holds interviews for the same. The number of students that benefit is usually around 100 but varies as per the students' requirements.

The college also has the facility to give fee concession from 50% to 100%, based on annual income, family background, girl child etc.

Following are tables of various scholarship schemes made available to the students of the college in the past four years:

**Table 5.1: Scholarship Data for the Year 2011-12**

College Scholarship			State/National level			Name of fund / J&k
Course Name	Amount	Students	Course Name	Amount	Students	
B.A (Prog)	6000	4	HISTORY(H)	4820*1+16610*1	2	J&K/NHFD
MATHS (H)	7500	5	MATHS (H)	8680	1	SC/ST BIHAR
ECONOMICS(H)	1500	1	B.COM (H)	9145*1+ 7170*1	2	DISTT.WELFARE/SC/ST WELFARE
HINDI(H)	15000	10	ANTHROPOLOGY(H)	7805	1	DISTT.WELFARE OFFICER
SANSKRIT(H)	6000	4	ECONOMICS(H)	27655	1	FAEA
CHEMISTRY	9000	6	CHEMISTRY (H)	8965	1	DISTT.WELFARE OFFICER
ELECTRONICS(H)	1500	1	M.Sc. CHEMISTRY	20000	1	INDIRA GANDHI PG SCH. FOR SINGLE GIRL CHILD
B.SC. LIFE SCIENCE	1500	1	B.A (Prog)	10405	1	NHFDC
PHYSICS(H)	4500	3				
ZOOLOGY(H)	1500	1				
B.COM (H)	4500	3				
COMPUTER SC.(H)	6000	4				
BOTANY(H)	1500*6+1200*2	8				



Table 5.2: Scholarship Data for the Year 2012-13

Course Name	V.C Fund		Students	College Scholarship		Students	State/National level		Name of fund / J&k
	Amount			Amount			Amount	Students	
B.A (Prog)	2000*10+						6000*1 +		
HINDI(H)	2500*2		12	42000		21	2520*1		J&K COUNCIL HARYANA GOVT.
HISTORY(H)	2000*20+2500*5		25	14000		7	7965*1+7965*1	2	GOVT. OF ARUNACHAL PRADESH
B.COM(H)	2000*4+ 2500*4		8	36000		18	30775	1	FAEA
CHEMISTRY(H)	2000*7+2500*1		8	6000		3		1	FAEA
SANSKRIT(H)		32000	16		12000	6		1	ICCR
B.S.C. PHYSICAL SC.		32000	16		12000	6			
BOTANY(H)		6000	3		22000	11			
ELECTRONICS(H)		6000	3		8000	4			
GEOLOGY(H)		8000	4		4000	2			
B.S.C. LIFE SCIENCE		2000	1		14000	7			
PHYSICS(H)		14000	7		10000	5			
ANTHRO(H)		20000	10		6000	3			
ZOOLOGY(H)		2000	1		6000	3			
M.A. ENGLISH		2500	1		2000	1			
					4000	2			

Table 5.3: Scholarship Data for the Year 2013-14

Course Name	V.C Fund		Students	College Scholarship		Students	State/National level		Name of fund / J&k
	Amount			Amount			Amount	Students	
SANSKRIT(H)	21000		7	10000		5	43243	1	A.I.C.T.E J&K STUDENTS
HINDI(H)	39000		13	12000		6	92000	23	RASTRIYA SANSKRITI SANSTHAN
CHEMISTRY(H)	12000		4	4000		2	50000	10	RASTRIYA SANSKRITI SANSTHAN
B.COM (H)	3000		1	20000		10	113295	1	A.I.C.T.E J&K STUDENTS
B.A.(Prog)	6000		2	12000		6			
HISTORY(H)	18000		6	2000		1			
MATHS (H)	3000		1	14000		7			
				4000		2			
				18000		9			
				2000		1			
				4000		2			
				12000		6			
				18000		9			
				6000		3			
				4000		2			

Table 5.4: Scholarship Data for the Year 2014-15

Course Name	V.C Fund		Students	College Scholarship		Students	State/National level		Name of fund / J&k
	Amount			Amount			Amount	Students	
M.COM	4000		1	8000		4	8225*1+ 7175*1	2	GOVT. ARUNACHAL PARDESH
SANSKRIT(H)	8000		2	12000		6	8075	1	GOVT. ARUNACHAL PARDESH
B.COM(H)	4000		1	8000		4	8175*1+8175*1	2	GOVT. ARUNACHAL PARDESH
HINDI(H)	24000		6	14000		7	9415	1	GOVT. ARUNACHAL PARDESH
HISTORY(H)	16000		4	4000		2			
MATHS (H)	20000		5	18000		9			
COMPUTER SC.(H)	4000		1	8000		4			
ELECTRONICS(H)	4000		1	8000		4			
BOTANY(H)	4000		1	4000		2			
				18000		9			
				6000		3			
				8000		4			
				2000		1			
				2000		1			
				2000		1			

#### Other Scholarships:

The students are also offered scholarships by DAV, Single Girl Child policy, NCERT and FAEA to name a few. In addition to these scholarships, students also benefit from the Inspire scholarships by Department of Science and Technology and the scholarships extended by CBSE.

Table 5.5: Other Scholarships

Year	DAV		Single Girl Child		NCERT		FAEA	
	Amount	Students	Amount	Students	Amount	Students	Amount	Students
2011-12	7750	1	120000	3	12000	2	-	-
2012-13	24000	1	20000	3	-	-	-	-
2013-14	-	-	-	-	-	-	28935	1





#### Scholarship for the Enabling Unit:

Two awards of Rs.5000 and Rs.3000 are given to the meritorious students of the Enabling Unit every year by the college Alumni Association.

#### Scholarship for the Differently-abled Students:

Every student belonging to the differently-abled category gets a full fee waiver and is required to contribute to the Students' Union fund and some other minimal charges only. The year-wise fee paid by these students is as follows:

YEAR	FEE (IN RS.)
1	585
2	20
3	220

All the differently-abled students who stay in the hostel get a full waiver for the hostel fee and a waiver of 50% in the mess bill.

#### **5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?**

Around 10 percent of the students receive financial assistance from state government, central government and other national agencies.

#### **5.1.4 What are the specific support services/facilities available for**

#### **Medical Facilities:**

This facility is available for students, teaching and non-teaching staff.

**Table 5.6: Medical Facilities**

Facility	Details
Dispensary Timings	<b>9 A.M. – 4.00 P.M.</b>
Days	6 days a week ; Mon- Sat (Sunday closed)
Facility	First Aid, Bed for Rest, Emergency
WUS –World University Health Centre facility	Every student is a member
Doctor	On call only-Dr. Krishan Golla (New Life Hospital)
Attendant	Nurse-Ms. Promila, available from 9am-4pm
Hospital facility	New Life Hospital
Ambulance facility	On Call only (New Life Hospital)
Maintenance of register	Yes
Notes:	<ol style="list-style-type: none"> <li>1. All Emergency cases are immediately brought to the notice of the Principal and the parents.</li> <li>2. Daily visit – 15 to 20 (students, teaching and non-teaching staff)</li> </ol>



### **Students from SC/ST, OBC and Economically Weaker Sections**

An SC/ST committee addresses concerns of students admitted in the reserved category.

Remedial classes are regularly held to bridge the learning gap. Special help is provided for laying a stronger foundation that enables them to cope up with the challenges of higher studies. For the economically weaker section, scholarships are provided as mentioned in 5.1.2.

### **Students with physical disabilities**

- An Enabling Unit was formed in the college on 23<sup>rd</sup> October 2011. Prof. Umesh Rai (Director, South Campus, University of Delhi) and the College Chairman, Padma Shri Dr. S.K. Sama had graced the occasion and had an interaction with the students of this unit. This cell consists of more than 100 volunteers to assist students with physical disabilities, with their regular course of studies. This society acts as a bridge between college administration and the differently abled students. This society also organizes various seminars and awareness campaigns, as well as an ***Annual Cultural Fest i.e. Pahal***. A positive and healthy relation is promoted between the differently abled students and the larger student community in college.
- Since 2013, laptops have been distributed to every differently abled student in the college as an assistive device.
- A recording device, ***Angel***, is provided to the visually challenged students to record their lectures. Earlier iPods were distributed to the differently abled students by the cell.
- Braille books are provided to read, and Braille slates and chalks to write.
- The college lift was constructed in 2014 to assist the orthopedically challenged students as well as the visually challenged students to reach their classes on the 1<sup>st</sup> and 2<sup>nd</sup> floor.
- Scanners and printers along with five computer systems are made available in the Enabling Unit Room.
- A separate reading/writing room has been provided since 2014.
- Ramps and a foot over bridge connecting two different blocks of the college has been constructed at various places of the college for the convenience of the VI and the OI category students.
- Magazines and Journals in Braille form are purchased monthly.
- The institution also has the provision of wheelchair.

### **Overseas students**

Admission of foreign students is handled by the Foreign Students Adviser, Foreign Students Registry, Faculty of Management Studies, University of Delhi. No foreign student is admitted by the College unless he/she produces a letter from the Foreign Students Adviser, University of Delhi, regarding his/her eligibility.

### **Students to Participate in various competitions/ National and International**

Full support is given to the students who represent the college in various extra curricular activities, academic events and sports, whenever needed. In case of short attendance, students are allowed to appear for the exams with the permission of the Principal. Moreover, flexibility to submit assignments/writing tests is available to such students. Other support is enumerated as follows:



- Infrastructure and facilities for practice and performances
  - Seminar room, amphitheater, auditorium, shooting range, sports ground etc.
  - Sport equipments, audio-visual aids, musical instruments
- Financial help to attend events where the students represent the college
- Teacher support
  - Accompanying them to the events
  - Continuous mentoring and moral support
- Inviting professionals/experts for guidance
  - Workshops and lectures

Enabling unit gives a lot of support to differently abled students who represent the college in various co-curricular and sports programs. It gives them a proper coach and specific area in the college to practice and also provides them with refreshments.

Details of two of the students from the enabling unit are enlisted as follows:-

Name of the Student	Year	Course	Representation	Tournament	Venue
Md. Saleem (VI)	2013	History(H)	India	Blind Football Tournament	Thailand
Deepak Kushwaha (VI)	2013	History(H)	India	World Athlete Championship	Brazil

#### **Organizing coaching classes for competitive exams**

- There is a provision for informal coaching for competitive exams. The college guides the students in preparation for the competitive exams beyond the curriculum. Support is provided in terms of books by ensuring availability of the required books in the library.
- Saturdays are declared as off for the third year students in the time-table so that they can make proper utilization of the time for preparation of the exams.
- The teachers also serve as mentors to guide them with their career options.

#### **Skill development (spoken English, computer literacy, etc.)**

- Since 1989-1990, college offers Certificate, Diploma and Advanced Courses in French and German language to students.
- Special workshops are held to teach software programs like Tally to enhance accounting skills, and econometric packages like Stata, Gretl etc. to enhance quantitative skills of the students.
- KPMG conducts regular workshops to enhance the career related skills of students working for *Enactus*, Hansraj.
- Guided tour to the National Stock Exchange to accentuate the theoretical knowledge.
- To enhance the speaking skills in the Sanskrit language, the college organizes week long workshops on regular basis for students and teachers across the colleges of the University.



- Regular workshops are conducted by the Computer Science society to familiarize the students with the topics like web development, MATLAB, etc.
- Public speaking seminars are held periodically to help students overcome hesitation or nervousness in addressing a large audience.

### **Support for “slow learners”**

Extra classes are conducted by all departments for students who are not able to cope with the pace of the class. One to one student-teacher interaction with the slow learners is encouraged outside the regular classes.

### **Exposures of students to other institution of higher learning/ corporate/ business house**

Students of some departments are taken for educational tour and field trips to other institutions under University of Delhi and outside Delhi like NII, NIPG etc. For science subjects, students get an opportunity to utilize the well-developed laboratories of some other institutions under University of Delhi.

### **Publication of student magazines**

The annual college magazine, "HANS" is published in three languages, Hindi, Sanskrit and English with contributions from the students, the teaching and non-teaching staff. In addition, individual departments also come out with their departmental magazines that highlight their views, achievements and latest trends in their fields. The names of departments and their respective magazines are given in the following table.

*Table 5.7: Student Magazines*

Department	Magazine name
Chemistry	Equilibrium
Physics & Electronics	Phyonics
Mathematics	Identity
Economics	The Yearbook and Okonomos
Commerce	De-Facto
Zoology	Srishti

#### **5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

Students are made to participate in group projects and innovation projects of University of Delhi to facilitate entrepreneurial skills among the students.

With *Enactus*, the college embarked on a journey with a vision to use the power of entrepreneurship for the benefit of the society. *Enactus* a non-profit organisation, is a society of Hansraj College that plans and implements business models with a socio-economic impact. A team of committed members continue to work with zeal and fervour throughout the year which reflect in the projects that it undertakes.

In the year 2013-14, having won the Wal-Mart grant for women empowerment, the first half of the year was engaged in Project *Swaad* that dealt with production of breakfast items by



small-scale Tiffin service providers around the North Campus, University of Delhi. The aim was to provide women from the low socio-economic background with a stable income and improve their business skills which was lacking otherwise. We also worked with an underprivileged women community for the same. Project *Lekhni* is the other project that *Enactus* undertook which dealt with selling customised spiral bound notebooks made by an underprivileged women community with no source of income. The spiral registers have now become a source of income for these women.

In addition to this, continuing with the legacy of Entrepreneurship Summit 2013 which was a huge success, the society came back with its next edition. The Entrepreneurship Summit 2014 enriched the students on the growing concept of entrepreneurship and offered a dynamic platform for healthy exchange of ideas between veterans in the field and the young students. The internship fair that the Summit organised provided many internships to students from across 40 companies.

#### **5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, quiz competitions, debate and discussions, cultural activities etc.**

The college offers admissions on the basis of ECA and sports to deserving candidates. Committees comprising of competent faculties and experts from the field select the most competent students to be the part of the college's ECA and sports group. All college students are encouraged to be a part of the various societies. Various teams under Dramatics, Music and Dance are formed and are active throughout the session performing in inter college and national events. The societies are host to many intra/inter college events all year round. Conveners and members of each committee are a constant motivation for the students and the results are overwhelming. Teacher coordinators accompany student participants to the events that are held outside the campus.

Following are some societies in the college that the students are encouraged to join:

#### **NSS**

The National Service Scheme (NSS) unit of Hansraj College works under the Ministry of Youth Affairs and Sports, Government of India. Its sole aim is to inculcate the spirit of service among college students to help individuals, groups and communities cope up with their problems. NSS is a group of self- motivated students who have decided to bring a change in the society and work towards spreading the message of peace, education, love and development. They try to inculcate in their peers a sense of responsibility towards the society, the Nation and most importantly, equip themselves with values for life. The activities of NSS, Hansraj can be followed at [www.hansrajcollege.co.in/nss/home.html](http://www.hansrajcollege.co.in/nss/home.html)

The objectives of NSS, Hansraj are:

- To foster a culture of 'Service before Self'
- To promote education among the underprivileged children
- To organise and sensitise rural communities on various social issues
- To propagate the idea of a 'Clean and Green' surroundings
- To spread the idea of the need to maintain personal hygiene and good health
- To encourage students to come together and contribute towards the society
- To spread smiles

NSS is the largest society of the college with over 600 volunteers coming from various disciplines and walks of life. It works under four different wings that promote welfare and



development in a plethora of fields, namely: *PADHAKU* (Education), Health, Rural Development and Environment, and Disaster Management.

### NCC

The college NCC wing imparts training to students interested in joining Army, Navy and Air Force. It inculcates discipline, patriotism and community service in the students and helps in framing their careers.

### Haritima

The Environment Awareness Society of the college, *Haritima*, is a society with the mission to create awareness among the students and public about the various environmental threats and its consequences.

### Women Development Cell

The main aim of this cell is to create general awareness, gender sensitization and women empowerment among the students of the college by holding lectures, workshops and interactive sessions.

### English Debating Society

The English Debating Society is one of the most active and prestigious societies in the college. With over 30 members, the society is an amalgamation of the brightest minds across a whole host of courses comprising Economics, History and Mathematics etc. The Society has had a long and illustrious history, during the course of which it has consistently produced and nurtured quality debaters, who have won numerous national & international debate competitions. The Debating Society traditionally organizes the main annual events - The Shanti Narayan Memorial National Debate, the Hansraj Freshers' Parliamentary Debate, and the Acropolis Parliamentary Debate. These events garner participation from all over the country and are attended by some of the best debaters across various universities.

### Swaranjali, the Music society

The Music Society of Hansraj College, with the support of the Principal and the ECA Conveners, has established quite a name in the University music circuit for many years now, and every year has been a phenomenal year for the society, with lots of new achievements. The society participates in the annual cultural festivals of AIIMS, Lady Shri Ram College, IIT Delhi, Mood Indigo, BITS Pilani, IIT Mumbai to name a few. The society organized the first college music festival, "Rachnotsav" in 2013, which was a tribute to Late Dr. Rachna Sharma, an eminent teacher who helped the ECA society grow from strength to strength.

### Navankur Society

The society was established with the help of students in the year 2005 for the benefit of the visually challenged students. Project preparation (assignments), cassette recording, writing answer sheets in examination etc. are some of the objectives of the society. Our students continuously work in these activities for the university and other colleges throughout the year. In the past years, around 100 students have helped more than 2,000 visually challenged students in their academic and other activities. More than 50 students have got government or private jobs with the help of Navankur volunteers. The Society organizes various cultural, literary and academic activities for such students.





### Terpsichorean : Choreography Society

Since its inception in 2002, Terpsichorean: The Hansraj College Choreography Society has constantly achieved new heights. Dance is an art a lot of people know but only a handful understand. Its potential as an expressive art is seldom utilised and this is where Terpsichorean stands apart. With an aim of striking that delicate balance between intricacy of movement and lucidity of expression, the society has bagged top honours at various colleges.

### Western Dance

Being a Western Dance society, *Oorja* is widely known for its versatility. It showcases a variety of dance forms including Jazz, Hip Hop, Semi-Classical, Contemporary, Krumping, Bollywood etc. It has also earned appreciation for including Dubstep and Chhao in its sequences.

### The Dramatics Society

The Dramatics society of Hansraj College saw its official inception in the year 1987. Since then, it has come a long way. Our students are adept at representing the social issues, in the plays and street plays that they stage.

### Sanskritiki

Since its inception, Sanskritiki has been working towards the propagation of Indian culture. The traditions, ethics and values are the main thrust areas of the society. Over the past four years, various lectures on Vedas and Epics like Gita and Mahabharata have been organized. In addition to these societies, each department has its own society that encourages participation from all department students.

### Additional academic support, flexibility in examinations

Students represent the college in various events across the country. Teachers allow students extra time to complete and submit their assignments. Tests, if missed are re-scheduled. Extra classes and extra time is given to students, and sessions are repeated for them to be in sync with what is happening in the class. In case of shortage in attendance, students are allowed to sit for the exams after consulting the convener and the principal. Students with special needs are given flexibility and extra time for examination.

### Special Dietary Requirements

Canteen in the college and Mess in the hostel are careful in preparing food for the students. Corrective measures are always taken by them to maintain proper hygiene. Mess staff of the hostel is always there to help VI and PI students to have their proper meal by helping them to dine in.

#### **5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT/ Central /State services, Defence, Civil Services, etc.**

- To assist the students in the preparation of competitive exams, required books are made available in the library.
- Saturdays are declared as off days for the third year students in the time table so that they can make utilization of the time for preparation of the exam.
- The teachers play the role of mentors to give proper guidance and assist them in extending references.





### 5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social etc.)

There is a counselling cell in the college that provides advice on career as well as on personal affairs. Faculty members are assigned to serve this purpose. If required, external agencies are also roped in to provide proper counselling. Psychological counselling is also provided by the internal faculty, and if required, help is sought from suitable experts.

### 5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

The College has a very active Placement Cell which aims to provide access to job opportunities for fresh graduates of the College. The Placement Cell interacts with the companies and arranges for on-campus interview of the students. Career fair is another feature of the college. It is conducted every year. Course wise placement data for the last year is given below:

**Table 5.8: Course-wise Placement for 2014-15**

COURSE	PLACED STUDENTS
B.A. (Hons.) Economics	22
B.Com. (Hons.)	70
B.A. (Hons.) History	1
B.Sc. (Hons.) Mathematics	3
B.A. Programme	2
B.Sc. (Hons.) Electronics	2
B.Sc. (Hons.) Physics	1
B.Sc. Physical Sciences	2

**Fig 5.1: Course-wise analysis of placed students**

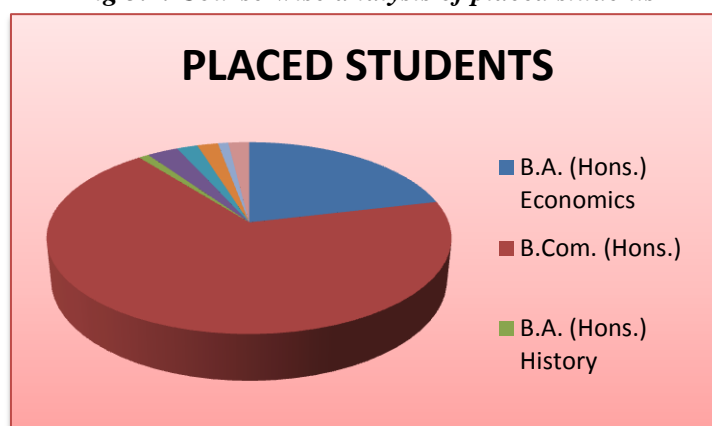




Figure 5.2: Course wise placements of students

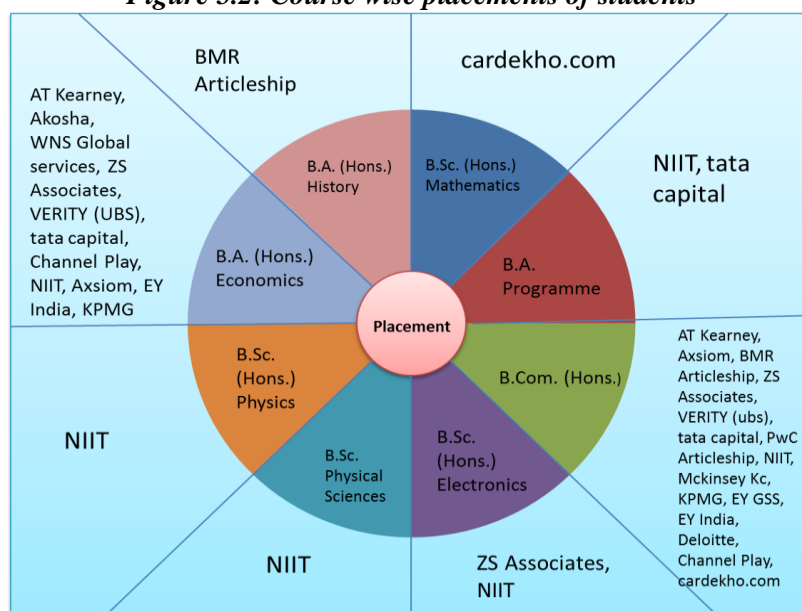


Table 5.9: Placed Students in the Year 2014-15

Name	Course	Companies Placed	Respective Package
Arsh Singh	B.A. (Hons.) Economics	Akosha	
Raghav Piyush Mittal	B.A. (Hons.) Economics	AT Kearney	9.5 LPA
Waras Singh	B.Com. (Hons.)	AT Kearney	9.5 LPA
Sarat Nair	B.A. (Hons.) Economics	Axiom	5.5-8 LPA
Shambhavi Bajaj	B.A. (Hons.) Economics	Axiom	5.5-8 LPA
Pratibha Jain	B.Com. (Hons.)	Axiom	5.5-8 LPA
Somya Singh	B.Com. (Hons.)	Axiom	5.5-8 LPA
Soumya Badoni	B.Com. (Hons.)	Axiom	5.5-8 LPA
Ayushi Puri	B.A. (Hons.) History	BMR. Articleship	
Hency Batheja	B.Com. (Hons.)	BMR. Articleship	
Ipsita Agarwalla	B.Com. (Hons.)	BMR. Articleship	
Pooja Gupta	B.Com. (Hons.)	BMR. Articleship	
Prashant Hirwani	B.Com. (Hons.)	BMR. Articleship	
Shikha Maheshwari	B.Com. (Hons.)	BMR. Articleship	
Abhishek Thakur	B.Com. (Hons.)	cardekho.com	3.6-5.5 LPA
Priyanka Agrawal	B.Com. (Hons.)	cardekho.com	3.6-5.5 LPA
Shaurya Gahlawat	B.Com. (Hons.)	cardekho.com	3.6-5.5 LPA
Ankit Chaturvedi	B.Sc. (Hons.) Mathematics	cardekho.com	3.6-5.5 LPA
Mohini Kaur	B.Sc. (Hons.) Mathematics	cardekho.com	3.6-5.5 LPA
Risha Bagchi	B.Sc. (Hons.) Mathematics	cardekho.com	3.6-5.5 LPA
Subhankar Agarwal	B.A. (Hons.) Economics	Channel Play	
Abhinav Khanna	B.Com. (Hons.)	Channel Play	
Kishan Raj	B.Com. (Hons.)	Channel Play	
Himanshi Jaggi	B.Com. (Hons.)	Channel Play	
Roopsheeka Rambojun	B.Com. (Hons.)	Deloitte	4 LPA
Akul Gupta	B.Com. (Hons.)	Deloitte	4 LPA
Aarti Kakkar	B.Com. (Hons.)	Deloitte	4 LPA
Archita Garg	B.Com. (Hons.)	Deloitte	4 LPA
Ashok Jangid	B.Com. (Hons.)	Deloitte	4 LPA
BinnyPal Singh Bakshi	B.Com. (Hons.)	Deloitte	4 LPA



Chitresh Bhatt	B.Com. (Hons.)	Deloitte	4 LPA
Divya Jain	B.Com. (Hons.)	Deloitte	4 LPA
Gaurav Agrawal	B.Com. (Hons.)	Deloitte	4 LPA
Kajal Gupta	B.Com. (Hons.)	Deloitte	4 LPA
Mahvish Hamid	B.Com. (Hons.)	Deloitte	4 LPA
Manasi Jain	B.Com. (Hons.)	Deloitte	4 LPA
Monil Gupta	B.Com. (Hons.)	Deloitte	4 LPA
Neelakshi Prabhakar	B.Com. (Hons.)	Deloitte	4 LPA
Nupur Ajmera	B.Com. (Hons.)	Deloitte	4 LPA
Radhika Rana	B.Com. (Hons.)	Deloitte	4 LPA
Rajat Khatri	B.Com. (Hons.)	Deloitte	4 LPA
Richa Ralhan	B.Com. (Hons.)	Deloitte	4 LPA
Rozly Gupta	B.Com. (Hons.)	Deloitte	4 LPA
Shubha Mrawat	B.Com. (Hons.)	Deloitte	4 LPA
Somya Gupta	B.Com. (Hons.)	Deloitte	4 LPA
Yashvi Saraf	B.Com. (Hons.)	Deloitte	4 LPA
Aishwarya Shanker	B.Com. (Hons.)	EY GSS	2.8 LPA
Akanksha	B.Com. (Hons.)	EY GSS	2.8 LPA
Ambika Soni	B.Com. (Hons.)	EY GSS	2.8 LPA
Arzoo	B.Com. (Hons.)	EY GSS	2.8 LPA
Guntas Jolly	B.Com. (Hons.)	EY GSS	2.8 LPA
Jaspreet Kaur	B.Com. (Hons.)	EY GSS	2.8 LPA
Mehak Bhalla	B.Com. (Hons.)	EY GSS	2.8 LPA
Rachita Gupta	B.Com. (Hons.)	EY GSS	2.8 LPA
Sangeeta	B.Com. (Hons.)	EY GSS	2.8 LPA
Surbhi Singhal	B.Com. (Hons.)	EY GSS	2.8 LPA
Vankush Lall	B.A. (Hons.) Economics	EY India	2 LPA
Ankit Upadhyay	B.A. (Hons.) Economics	EY India	2 LPA
Radhika Sen	B.Com. (Hons.)	EY India	2 LPA
Shivam Mehta	B.Com. (Hons.)	EY India	2 LPA
Samridhi Suman	B.Com. (Hons.)	EYGSS	2.8 LPA
Ankit Bagga	B.A. (Hons.) Economics	Fly Goldfinch	2.5-3 LPA
Arushi Garg	B.A. (Hons.) Economics	KPMG	2.75 LPA
Palash Jain	B.A. (Hons.) Economics	KPMG	2.75 LPA
Sakshi Fotedar	B.A. (Hons.) Economics	KPMG	2.75 LPA
Megha Bhola	B.Com. (Hons.)	KPMG	2.75 LPA
Misha Kalra	B.Com. (Hons.)	KPMG	2.75 LPA
Vanisha Garg	B.Com. (Hons.)	KPMG	2.75 LPA
Pranay Saraf	B.Com. (Hons.)	MckinseyKc	4.4 LPA
Apoorva Singh	B.A. (Hons.) Economics	NIIT	4 LPA
Amil Bhatnagar	B.A. Programme	NIIT	4 LPA
Shubhneet	B.Com. (Hons.)	NIIT	4 LPA
Sweta Roy	B.Com. (Hons.)	NIIT	4 LPA
Ashmit Singh	B.Sc. (Hons.) Electronics	NIIT	4 LPA
Akshay Jangir	B.Sc. (Hons.) Physics	NIIT	4 LPA
Japneet Bedi	B.Sc. Physical Sciences	NIIT	4 LPA
Preeti Panwar	B.Sc. Physical Sciences	NIIT	4 LPA
Akshay Manocha	B.Com. (Hons.)	PWC	2.8 LPA
Aanchal Arora	B.Com. (Hons.)	PwC Articleship	
Abhimanyu	B.Com. (Hons.)	PwC Articleship	
Abhimanyu	B.Com. (Hons.)	PwC Articleship	



Akash Chugh	B.Com. (Hons.)	PwC Articleship	
Gautam Tharad	B.Com. (Hons.)	PwC Articleship	
Piyush Jain	B.Com. (Hons.)	PwC Articleship	
Shriya Garg	B.Com. (Hons.)	PwC Articleship	
Vidushi Yadav	B.Com. (Hons.)	PwC Articleship	
Amitoj Singh	B.A. (Hons.) Economics	Tata Capital	
Ujjwala Sharma	B.A. Programme	Tata Capital	
Tarun Gupta	B.Com. (Hons.)	Tata Capital	
Shipra Chopra	B.Com. (Hons.)	Tata Capital(Waiting)	
Karan Padgaonkar	B.A. (Hons.) Economics	Verity (UBS)	6.08 LPA
Harshit Sharma	B.A. (Hons.) Economics	Verity (UBS)	6.08 LPA
Manvika Gulati	B.A. (Hons.) Economics	Verity (UBS)	6.08 LPA
Manish Kumar	B.Com. (Hons.)	VERITY (UBS)	6.08 LPA
Shivani Verma	B.Com. (Hons.)	VERITY (UBS)	6.08 LPA
Nidhi Chhaparia	B.A. (Hons.) Economics	WNS Global services	6 LPA
Ashna Goenka	B.A. (Hons.) Economics	ZS Associates	4.2 LPA
Akarsh Kumar Sahu	B.A. (Hons.) Economics	ZS Associates	4.2 LPA
Purna Gupta	B.A. (Hons.) Economics	ZS Associates	4.2 LPA
Sanjana Pachory	B.A. (Hons.) Economics	ZS Associates	4.2 LPA
Shristi Changia	B.Com. (Hons.)	ZS Associates	4.2 LPA
Prakhar Mishra	B.Sc. (Hons.) Electronics	ZS Associates	4.3 LPA

**5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

Yes, the college has a functional grievance redressal cell.

- A grievance collection box is placed outside the Principal's room. Each grievance submitted is discussed by the grievance committee and appropriate action is taken as necessary
- This committee works actively during the time of admission and throughout the year regarding various grievances.

Following are some grievances that were addressed in the last four years:

Grievance	Solution
Need for water purifiers with the coolers	Installed water purifiers
Need for benches to sit on in the canteen area	Benches were installed in the area
Need for more photocopy facility	More photocopy machines were provided
Need for two wheeler parking for students	Provided near the main entrance
Notice boards at vital areas in college	Provided
More options for food	Nescafe kiosk was put up
Computer facility with internet access for non-Computer Science students	Around 80 computers were made available in the new labs and library



### 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

The college constitutes the committee as mentioned in the official guidelines by the government of India, applicable at the given time. Names of the convener and the members along with their phone numbers and email ids are put up in premises of the college for easy access. This committee covers all students, teaching staff & non-teaching employees. Regular workshops and programmes are organized by the committee to make women aware of their rights and strengths. Some of the events that were conducted are as follows :

1. A workshop was organized on 12<sup>th</sup> March 2012, by the Delhi Commission of Women, on the protection of women at workplaces.
2. A pre-marital counselling lecture held in October 2012 by Delhi Commission of Women.
3. A talk by the noted women's rights activist Kavita Krishnan, was organized in February, 2014.
4. Poster competitions on gender sensitivity were organized to spread knowledge and encourage discussions on issues related to gender.
5. Annual self defence workshops are held in association with the Delhi Police.
6. Street plays are performed on topics related to victimization of women in the socio-cultural space.

### 5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

An anti-ragging squad is formed to keep a vigilance on ragging activities in the college, if any, so that a peaceful environment can be maintained. No such cases have been reported in the last four years.

Posters, stickers and boards	Displayed in the college premises
Circulars	Updated circulars & notifications on DU website are put up in the college
Committee	2015- 16: 31 members; Convenor Dr. V.S. Sajwan 2014- 15: 13 members; Convenor Dr. M.P. Sharma Names and phone numbers of committee members are put up on the notice boards
Guidelines	Gazette guidelines are followed
Complaint box in the college	Yes there is a box available for written complaints to be dropped.
Boards contain following details:	
Joint control room North campus	Contact nos. are displayed
24x7 National AR Helpline no.	Displayed
PCR Van & police facility	Available
University Information Centre	Phone no. available. Can be contacted Monday to Friday.
Email Facility	Yes, available on DU website as well
Guard Facility in hostel	Extra personnel posted specially for a period of two months after admissions, for the safety of first year students in hostel.



### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

Student welfare schemes/committees	Infrastructure for student welfare
Equal Opportunity Cell	GCR (Girls Common Room)
SC/ST Committee	Amphitheater
Enabling Unit	Medical room and services
Student Welfare Committee	Banking and ATM services
College Complaint Committee	Canteen at subsidized rates
Women's Development Committee	Computers with internet access
Placement Cell	Library with software for search facility
Anti Ragging Committee	Sports complex
Prevention of Sexual Harassment Cell	Shooting range
Scholarships	Volley ball court
Curricular And Co-Curricular Activities	Archery training arena
Participation in DUSU	Badminton court
Active Student Council	Yoga room
NSS	Hostel for boys
NCC	Well furnished department laboratories

### 5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

The Hansraj College Alumni Association has more than 8000 members. The purpose is to bring together the various alumni on a common platform for strengthening the network of its student community. It has a formally organized structure with elected office bearers sharing the responsibility of its functioning with the college. Its annual meeting is held in the college on the first Sunday of February every year. Over the years, these meetings have emerged as a warm meeting ground for ex-students and their families.

Contributions:

- A large number of scholarships are funded by the Alumni
- Cash help in renovation of the Auditorium and classrooms
- Ammunitions provided for the shooting range
- A large number of teachers of the college are alumni of the college, the last three principals who served our college are also alumni of the college
- Alumni who have made their mark as filmmakers have shot movies on our premises, thus exposing the students to the diverse and exciting field of the film industry.
- Eminent professionals/bureaucrats/politicians/industrialists etc. who are the alumni of the college are invited as guest speakers to motivate and guide our students.



## 5.2 Student Progression

### 5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Informal records are maintained at the department level to track students' progression. It is generally observed that 65-70% of the students opt for higher education. There is no formal provision for the tracking of students progression.

### 5.2.2 Provide details of the program wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish program-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

*Table 5.10a: Program-wise Analysis of Pass Percentage for the Year 2012*

	Appeared	Passed	Pass %	No. of students with ERs	Failed
Anthropology	NA	NA	NA	NA	NA
B.A.(Prog.)	82	52	63.41463	26	4
Botany	29	29	100	0	0
Chemistry	125	125	100	0	0
Commerce	186	180	96.77419	2	4
Computer Science	41	40	97.56098	1	0
Economics	86	77	89.53488	2	7
English	63	61	96.8254	2	0
Electronics	39	39	100	0	0
Geology	37	37	100	0	0
Hindi	52	45	86.53846	4	3
History	34	32	94.11765	1	1
Life Sciences	25	25	100	0	0
Mathematics	33	33	100	0	0
Physics	99	99	100	0	0
Physical Sciences & Applied PS	26	26	100	0	0
Sanskrit	21	17	80.95238	4	0
Zoology	31	31	100	0	0



**Table 5.10b: Program-wise Analysis of Pass Percentage for the Year 2013:**

	Appeared	Passed	Pass %	No. of students with ERs	Failed
Anthropology	NA	NA	NA	NA	NA
B.A.(Prog.)	103	88	85.4369	13	2
Botany	47	47	100	0	0
Chemistry	184	184	100	0	0
Commerce	189	189	100	0	0
Computer Science	55	55	100	0	0
Economics	105	105	100	0	0
English	72	68	94.4444	3	1
Electronics	28	28	100	0	0
Geology	35	35	100	0	0
Hindi	45	45	100	0	0
History	41	38	92.6829	3	0
Life Sciences	44	44	100	0	0
Mathematics	62	62	100	0	0
Physics	119	119	100	0	0
Physical Sciences & Applied PS	52	52	100	0	0
Sanskrit	25	18	72	3	4
Zoology	48	48	100	0	0

**Table 5.10c: Program-wise Analysis of Pass Percentage for the Year 2014:**

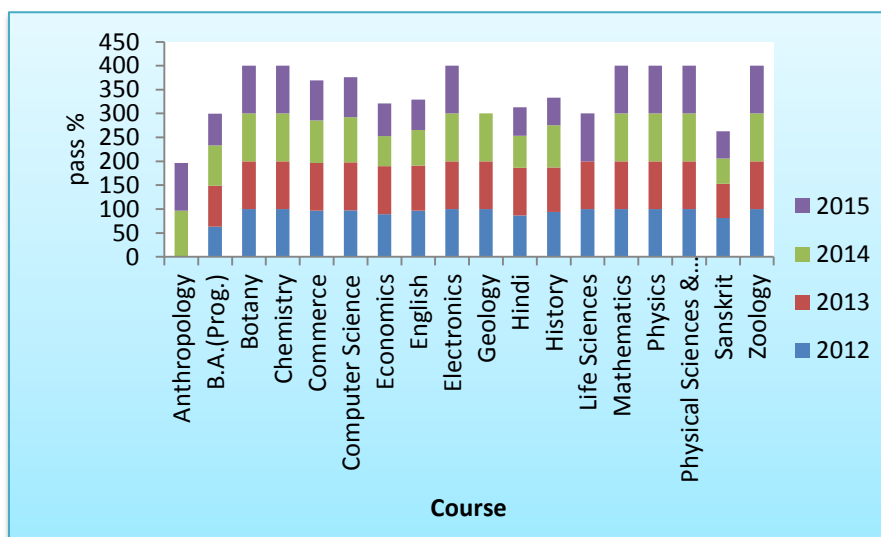
	Appeared	Passed	Pass %	No. of students with ERs	Failed
Anthropology	29	28	96.55172	1	0
B.A.(Prog.)	72	61	84.72222	11	0
Botany	60	60	100	0	0
Chemistry	84	84	100	0	0
Commerce	224	199	88.83929	25	0
Computer Science	56	53	94.64286	3	0
Economics	125	79	63.2	36	0
English	58	43	74.13793	15	0
Electronics	26	26	100	0	0
Geology	23	23	100	0	0
Hindi	48	32	66.66667	16	0
History	44	39	88.63636	5	0
Life Sciences					
Mathematics	49	49	100	0	0
Physics	58	58	100	0	0
Physical Sciences & Applied PS	65	65	100	0	0
Sanskrit	32	17	53.125	15	0
Zoology	41	41	100	0	0



Table 5.10d: Program-wise Analysis of Pass Percentage for the Year 2015

	Appeared	Passed	Pass %	No. of students with ERs	Failed
Anthropology	30	30	100	0	0
B.A.(Prog.)	122	81	66.3934	39	0
Botany	78	78	100	0	0
Chemistry	68	68	100	0	0
Commerce	248	207	83.4677	41	0
Computer Science	43	36	83.7209	7	0
Economics	132	90	68.1818	42	0
English	71	45	63.3803	24	2
Electronics	31	31	100	0	0
Geology	NA	NA	NA	NA	NA
Hindi	65	39	60	21	5
History	52	30	57.6923	22	0
Life Sciences	50	50	100	0	0
Mathematics	68	68	100	0	0
Physics	82	82	100	0	0
Physical Sciences & Applied PS	113	113	100	0	0
Sanskrit	39	22	56.4103	14	3
Zoology	57	57	100	0	0

Fig 5.3: Course wise Pass Percentage for the Last Four Years



Students in our college which is ranked among top ten colleges of India, are admitted at a very high cut off percentage in all the courses. Most of them also aspire for technical courses like B.Tech, B.E., Architecture, Medicine and Law to name a few. The results of these technical courses and counselling for admission to their colleges and/or universities continue even after admissions get closed in colleges of University of Delhi. As a result, a drop is seen in the number of students who actually take admission and the ones who appear in the exams. Also it is very common for students of Sciences, Mathematics and Economics streams to re-appear for competitive exams in the second year of the undergraduate course, which they



have better chances of clearing. As a consequence of which, the number of students that appear in the final year exams of these courses goes down.

Students with special needs and those from economically weaker sections of the society are helped through various scholarships and fee concession schemes as mentioned in section 5.1.2. The college and its faculty members provide financial support to such students, and it is assured that financial constraints are not a reason for our students to discontinue higher studies. In rare cases, some severe medical condition has been the reason for dropping out, as informed by a few departments.

As is the rule of the University of Delhi, a student gets five years to complete a course, for instance, a student admitted in the year 2010 has an opportunity till the year 2015 to clear all papers, so in some cases we see the number of students that appear in the final year is larger than the number of students who had appeared in the first year of the same batch.

As reflected in the data, the pass percentage of each course is 100% with negligible variations. This result is consistent for each course over the past four years. The students with Essential Repeats are not considered as failed.

### **5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?**

- A functional placement cell is in place. The placement cell gets in touch with the companies and arranges for on-campus interviews.
- To foster research acumen among the students, the Science departments arrange for group projects as well as innovation projects under University of Delhi. It is observed that in recent past, the percentage of students applying for higher education has increased by 50%.

#### **Facilitation for Higher Education**

- Educational trips to science laboratories
- Trips to literary festivals/libraries
- Field trips by the departments of Botany and Zoology
- Tours to Archaeological Survey of India, Jama Masjid etc. by Sanskrit and History departments

#### **Facilitation for employment**

- Active placement cell
- Professionals are invited for lectures and seminars on career guidance
- Internship Mela is held every year during Jan-Feb for the Commerce students
- Students are motivated for summer internships which help them for exploring career options

### **5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

Usually the dropout rate of students in most of the courses is very low. In general, the faculty members and mentors identify the students who are at the risk of dropout through



continuous interaction inside and outside the class and provide academic and psychological support as necessary.

### 5.3 Student Participation and Activities

#### 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

Following are the sports that are represented by the college teams:

1. Basket Ball (M)
2. Aquatics (M) (Swimming)
3. Lawn Tennis (Men)
4. Squash Racket
5. Archery (M &W)
6. Shooting (Pistol & Rifle,(M & W)) (only International in Skit, Trap, Shotgun)
7. Table Tennis (M & W)
8. Badminton (M & W)
9. Chess, Polo, Golf and Equestrian ( only for International level players)

Sports facilities are made available to all students under the programme 'Games For All'. All students are expected to participate. Existing facilities are continuously upgraded and improved.

Sports Training Infrastructure Facilities:

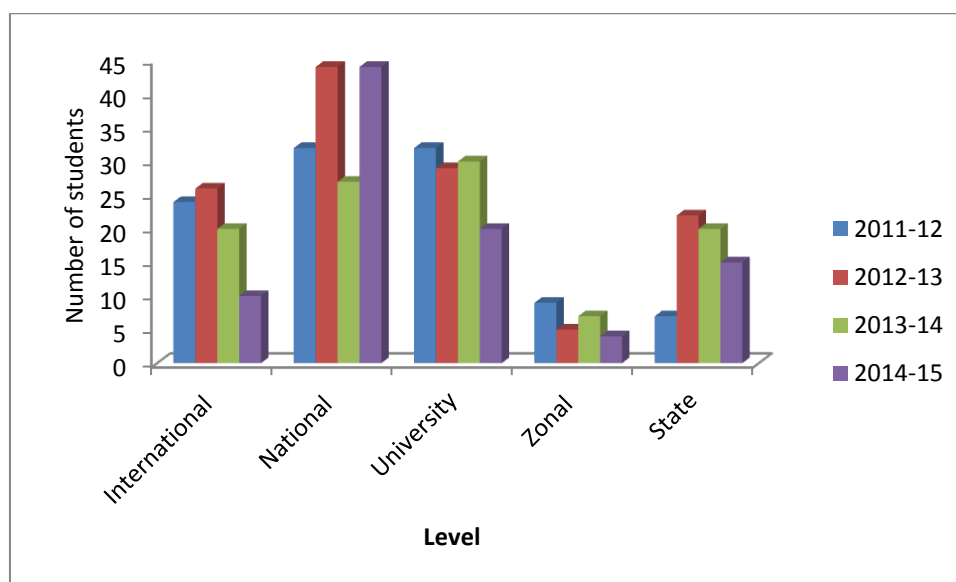
- Archery Training Arena with Equipments.
- Indoor Wooden Badminton Hall (Dimensions: 18.40mts x 12.15mts x 8.20mts)
- One concrete Basketball Court with uprights / Fiber Boards
- Play Field ( Dimensions: 140mts x 100mts) with Centre Cricket Pitch and Football uprights
- Indoor 10mts Shooting Range with 06 lanes
- Volleyball Court with Uprights , one, standard size
- Sports Room (Dimensions: 6.50mts x 4.30mts)
- Sports Store Room (Dimensions: 6.50mts x 6.50mts)

**Table 5.11: Representation of Hansraj College Sports Students at various levels**

Level	2011-12	2012-13	2013-14	2014-15
International	24	26	20	10
National	32	44	27	44
University	32	29	30	20
Zonal	09	05	07	04
State	07	22	20	15



**Fig 5.4: Representation of Hansraj College Sports Students at various levels**



#### Cultural and other extracurricular activities available to students

Debating Society, Dramatics Society, Fine Arts Society, Music and Dance societies, *Haritima* (Environment Awareness Society) and Spic-Macay Society. Over 600 members in the NSS that is involved actively in Rural development, Health and Education concerns. All department societies also play a significant role in encouraging students to get involved in competitions, quizzes, society seminars, departmental festivals and more. During the whole of the session, students develop skills in the field specific co-curricular activities along with academic skills and win many awards.

#### **5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.**

**Table 5.12: Student Achievements in ECA**

Event	2011-12		2012-13		2013-14		2014-15	
	Positions	Participations	Positions	Participations	Positions	Participations	Positions	Participations
Music	18	25	29	50	36	60	51	65
Dramatics	31	45	41	54	19	30	11	24
Dance	21	28	22	29	14	25	11	25
Choreography	16	18	15	17	7	7	8	13
Debating	19	25	34	43	58	204	30	48



Fig 5.5: Student Achievements in ECA

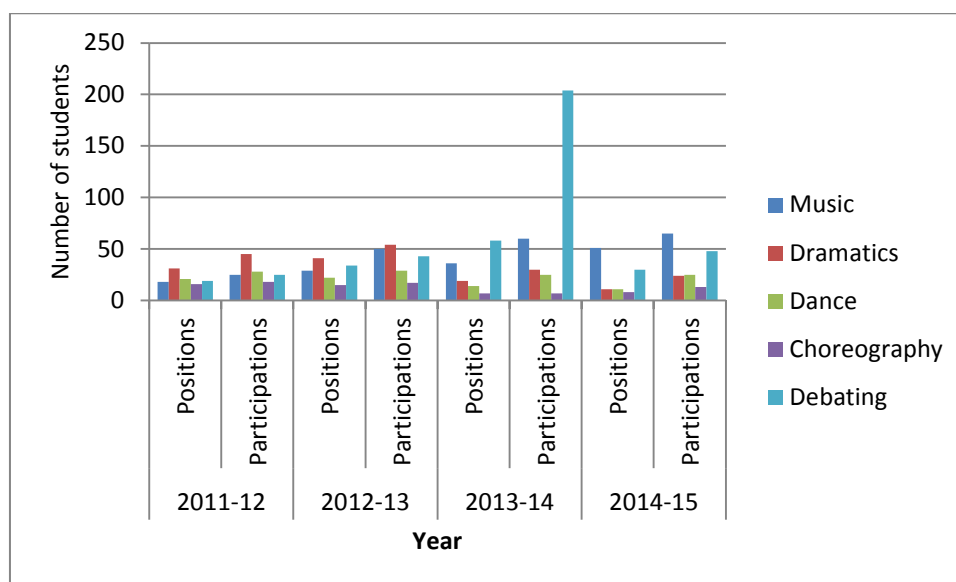
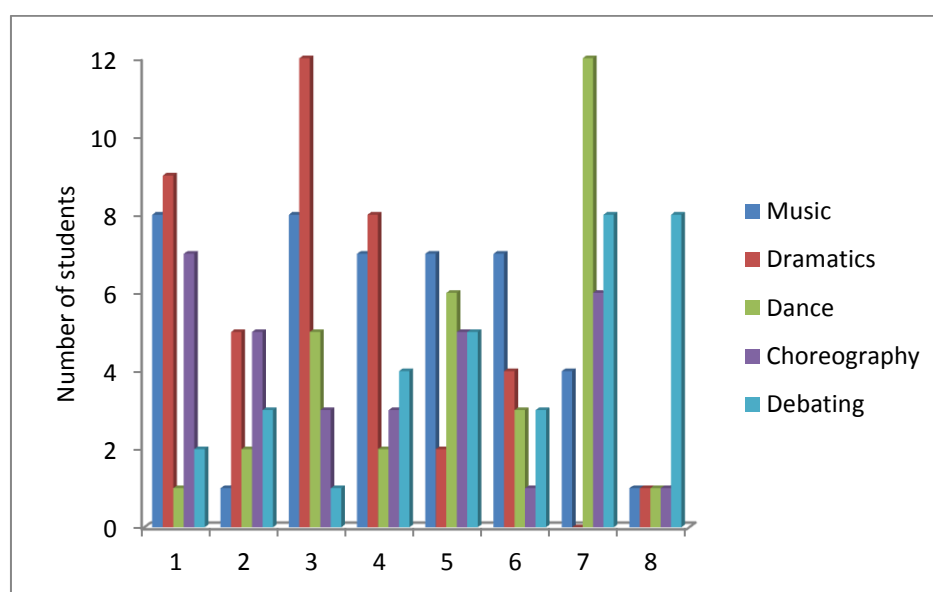


Table 5.13: College Awards

College Awards	2011-12		2012-13		2013-14		2014-15	
	Memento	Blazer colour	Memento	Blazer colour	Memento	Blazer colour	Memento	Blazer colour
Music	8	1	8	7	7	7	4	1
Dramatics	9	5	12	8	2	4	Nil	1
Dance	1	2	5	2	6	3	12	1
Choreography	7	5	3	3	5	1	6	1
Debating	2	3	1	4	5	3	8	8

Figure 5.6: College Awards





### **5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**

The feedback link is provided on the college website through which employers and graduates may provide feedback on various institutional provisions. Feedback is analysed by the IQAC and appropriate recommendations are made to the principal.

Feedback is also taken from the employers during and after the on-campus placement interactions and also during the continuous interaction with the companies by the placement committees.

### **5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.**

The college publishes an annual magazine called 'Hans' where the students get a platform to showcase their literary skills. Students of enabling unit too can get their articles and poems published.

Most of the departments publish department magazines as mentioned in 5.1.4. Students are given responsibility for every stage of collection, assimilation and finalization of the magazine, under the guidance of the teachers. Students contribute articles, stories, poems etc. and manage the whole process.

Besides, wall magazine is another way of encouraging talent as students in the departments are given a theme to write an article, fiction, a poem, drawing, or any form of expression that they like.

NSS students make posters for various socio-economic causes like Blood donation, cancer prevention, Girl child safety, Rural development, etc and display them at prominent places in the college.

### **5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

Yes, the college has a student union. Its constitution is as follows- President, Vice president, Joint Secretary, General Secretary, two Central Councillors.

The Student Union is democratically elected through secret ballot, the process is laid out in detail here:

1. Nominations are filed in the college.
2. Previous records of the candidates are checked.
3. If the candidate's record is found sound as per the University guidelines, he or she is allowed to contest the elections.
4. Elections are conducted on the basis of secret voting by the students.
5. The candidates with the majority votes are selected for the different posts of the union.





The major events that the council organises are the college freshers' and the annual college fest. Besides that, the union organises various seminars, pertaining to student development, environmental awareness, etc. throughout the year. Also, it is the duty of the council to listen to the grievances of the students of the college and take appropriate actions for the same.

For the development expenses and for organising the events in the college, the council uses the union fund which is included in each student's college fee. A major portion of that is used in organising the college freshers'. Besides that the council may approach certain sponsors for their events. The college keeps a track of all such sponsors throughout the year.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

- There are Class representatives in first, second and third year each for each subject.
- Department societies are elected by the students. The society members interact with the department head and faculty for feedback and organizing department events.
- Hostel committee has students as its members.
- The college has been awarded with 13 Innovation projects which has 10-12 student members each. Innovation projects are awarded by the University Innovation Centre. Every year, teachers and students get the opportunity to contribute actively in these projects.

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution?**

The Alumni and former faculty members of the college are invited for lectures in their respective departments. Former alumni are active members of the DAV Committee. Over the years, the retired Principals of Hansraj College have been appointed as Chairman DAV Committee, Secretary, Vice President of DAV Societies and many such influential posts. They have been guiding and helping the college in networking and collaborating with other DAV Institutions which are about 1500 in number. The college has created a page for the alumni in social networking facilities like Facebook and the alumni are actively networked using the WhatsApp facility. There is a website for alumni and former faculty members, which is linked with the college website.

**5.3.8 Any other relevant information regarding Student Support and Progression which the college would like to include.**

Apart from all the facilities mentioned in this section, student support and progression has seen other dimensions of growth through the following:

Participation in Antardhwani: All students get motivated by our college's active participation in Antardhwani, the cultural festival of the University of Delhi. It intends to bring the university community together to share and celebrate the creativity, talent, innovation, experiments and achievements. Since 2012, our college has showcased information about our history, faculty profile, students' activities, academics, sports, cultural and other achievements. Innovations projects are also showcased here and we have been proud winners of awards all these years.



## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

**6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of Addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

*Tamso ma jyotirgamaya*, 'Lead us from darkness to light', such is the vision which guides us on the path of success by taking wise decisions. Hansraj College aims at developing versatile human beings who can shoulder the responsibilities of the society and the nation, working towards achievement of goals. With a wide variety of departments ranging from Science, Commerce to Humanities, we equip our students with all the qualities needed to build a good character required to attain emotional stability, social maturity and economic independence.

The Staff Council, through its various committees, formulates the guidelines to be followed both at department and administrative level through various rounds of discussion with Principal and Management. A streamlined plan for smooth functioning of committees is being fabricated. (Further details in 1.1.1)

**6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

The Governing Body of Hansraj College is a progressive group of distinguished people from the society who ensures that the College excels beyond the conventional tenets. It is ensured by the members of Governing Body, principal and the faculty members, high standards of education and good discipline is maintained.

#### **Design of Quality Policy**

The Academic Affairs Committee set up by the Staff Council is a structured committee in place for the design and implementation of the quality policy of the institution. Draft quality policy is created by the Committee in consultation with the faculty members, keeping in mind the institutional vision and mission. The draft quality policy is forwarded to the Principal and the Governing Body for any changes.

#### **Updating Quality Policy**

The quality policies are periodically reviewed by the Principal and the Academic Affairs Committee for any changes that are necessary. Changes to the quality policy are made in consultation with the faculty members. Any changes are forwarded to the Principal and the Governing Body for approval.

#### **Implementation of Quality Policy**

For the purpose of implementation of quality policy, a number of academic and administrative committees are constructed under the authority of the Principal by the Staff Council. Action plans are created by the committees for the implementation of the quality policies approved by the management. The implementation is usually monitored by the



IQAC for any deviation or timely implementation.

### **Location of Quality Policy**

All quality policies related to academic performance, administrative management, digital usage, environment, inclusiveness etc. are available on the college website. Copy of the quality policies is also available with the IQAC office.

In addition, the Staff Council also sets up various other committees to look into academic matter viz. preparation of time-table, matters pertaining to admissions, conduct of examinations, internal assessment moderation etc.

### **6.1.3 What is the involvement of leadership in quality initiatives?**

- ***The policy statements and action plans for fulfillment of the stated mission***
  - The policy statements and the vision and mission of the institution are communicated to the staff, faculty members and various academic and administrative committees and sub committees by the Principal.
  - At the beginning of the academic session, an orientation program is conducted for the students.
  - In case of the introduction of a new programme, faculty members are given instructions for curriculum delivery adhering to the quality policy of the institution
  - The stated objectives of the Quality Policy are also explained during the orientation program conducted for the new faculty members.
- ***Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan***
  - Action plans are formulated by the various committees and sub committees of the institution. The action plans are aligned with the Quality Policy and the overall goals and objectives of the institution.
  - Each teacher-in-charge in consultation with other faculty members of their department creates the action plan for academic activities for the year ahead.
  - Action plans are created for the infrastructural improvements considering the capacity improvement plan and demand analysis of various departments.
  - Action plans of the committees, sub committees and the IQAC are forwarded to the Principal and the Management for approval.
  - Action plans are monitored periodically to ensure their progress.
  - At the end of the year, the implementation progress of the action plans is reviewed. Any deviation noted is reported to the Principal.
- ***Interaction with stakeholders***
  - The IQAC conducts regular interaction with the stakeholders such as teachers, alumni, students and the members of the neighboring community. Suggestions are noted and forwarded to the Principal and the management for necessary actions.
  - Feedback link is available in the college website where the stakeholders may provide feedback on curriculum, library services, various institutional provisions and institutional performance.



- Hansraj College Alumni association is well established and very active. The Alumni Association conducts periodic meeting and takes an active interest in the overall development of the college. Feedback is provided by the Alumni Association to the management with input related to the important processes.
- ***Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders***
  - The IQAC takes input from all departments and the stakeholders regarding requirement of new infrastructure or any learning or human resources.
  - A need-based analysis is conducted for capacity planning. Input is taken from various departments, and the trend is analyzed from the past data so as to understand the requirement of the new infrastructure or learning or any other resources.
  - As necessary, input from the non teaching staff are also taken into consideration and given due attention.
- ***Reinforcing a culture of excellence***
  - Hansraj College is known for excellence in providing quality education ensuring holistic development of the students. The IQAC strongly believes in implementing a culture of excellence in every activity of the college.
  - Academic excellence beyond the curriculum is ensured by organizing seminars, symposia, workshops, guest lectures, implementing innovation projects funded by the University of Delhi and implementing innovative teaching practices.
  - Forming a number of societies for extra-curricular activities provides a platform to students to project their talent. The societies have received a number of awards for various extra-curricular activities in the past.
  - A number of extension activities are conducted to Address excellence in social cause. *Padhaku* is a social wing of NSS-HRC that provides free education to underprivileged children. The environmental committee, *Haritima*, conducts annual cyclothon every year in collaboration with other institutions for generating awareness for sustainable environment. The women's cell is running a campaign called Pink Chain to generate awareness about cancer in women.
  - The *Yagyashala* of the college where *havans* are performed every month is an important initiative helping its staff and students to have a good physical and mental health.
- ***Champion organizational change***
  - The leadership always promotes changes to ensure quality teaching learning for the students. For example, ICT facilities are introduced in the institution for the faculty and students. Wi-fi campus with advanced computer laboratories is available for usage for the faculty and the students.
  - The IQAC also promotes changes for implementing quality processes across the institution.

**6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

All policies and plans are reviewed and approved by the Principal and the Governing Body. Various committees and sub committees are in charge of the implementation of the action plans. The implementation progress is reviewed on a periodical basis and it is reported in the regular meetings of the Governing Body. Any deviation or concern is also reported and appropriate actions are taken as necessary.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

Complete autonomy is provided to the departments for academic leadership. The teacher in charge of every department along with other faculty members decides on the academic calendar of the department based on the university academic calendar.

The workload for every faculty is also prepared at the department level based on the preference and expertise of the faculty and the requirements of the curriculum.

The departments decide on field trips and educational tours. Some departments organize study tour to other institutions across the country. For instance, students from the Department of Botany were taken to the hilly areas of Uttaranchal to make them observe and study the plants growing in their natural habitat. There are a lot of plants which are part of their curriculum but seldom grow in Delhi. A visual experience provides them with some amount of better understanding and clarity in concepts. In a similar manner department of Zoology also arranges a number of excursions to National Park and Wildlife Sanctuaries to show the animal diversity in the natural habitat.

The faculty is provided with the latest ICT tools. They are encouraged to implement innovative teaching practices for ensuring quality learning.

A direct connection to the online library of the University of Delhi is provided in the library for all faculties.

**6.1.6 How does the college groom leadership at various levels?**

- The departments are provided with academic autonomy to decide on academic affairs. The teacher-in-charge of the department is usually decided on rotation basis according to seniority.
- A number of committees and subcommittees are created in the institution, and the accountability for the functioning of these committees are reserved for their conveners.
- Faculty members are also members of the IQAC and the Governing Body of the college.
- Faculty members are also provided with an opportunity to mentor the students of different societies helping them to further develop their leadership skills.

**6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

- The college promotes a culture of decentralized management. Complete operational autonomy is provided to the individual departments. The departments decide on the workload, lecture schedule, field trips and educational tour, departmental academic calendar, books to be purchased for the library and procurement of departmental items.
- The various committees and subcommittees are made in charge of implementation of action plans. The progress is monitored and corrective measures are taken.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

The college actively promotes a culture of participative management. The Governing Body of the college and the IQAC includes members from the teaching staff, non teaching staff and students. A number of committees and sub committees are also formed that includes members from faculty, non teaching staff and the students.

**6.2 Strategy Development and Deployment****6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?*****Quality Policy***

The institution has a formally stated quality policy. Quality policies are designed and developed for academic affairs, administrative activities, data usage, inclusiveness etc.

***Review of Quality Policy***

Quality policies are reviewed by the Principal and IQAC every year for any changes.

***Design of Quality Policy***

A structured process is in place for design and implementation of the quality policy of the institution. Draft quality policy is created by the IQAC in consultation with the faculty members, keeping in mind the institutional vision and mission. The draft quality policy is forwarded to the Principal and the Governing Body for any changes and subsequent approval.

***Updating Quality Policy***

The quality policies are periodically reviewed by the Principal and the IQAC members for any changes that are necessary. Changes to the quality policy are made in consultation with the faculty members.

**6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Development Committee constituted by the staff council at Hansraj College makes perspective plan for the institution. Looking at the need of the hour the committee proposes expansion and extension plans which after due deliberations are proposed to the Governing Body. Once the





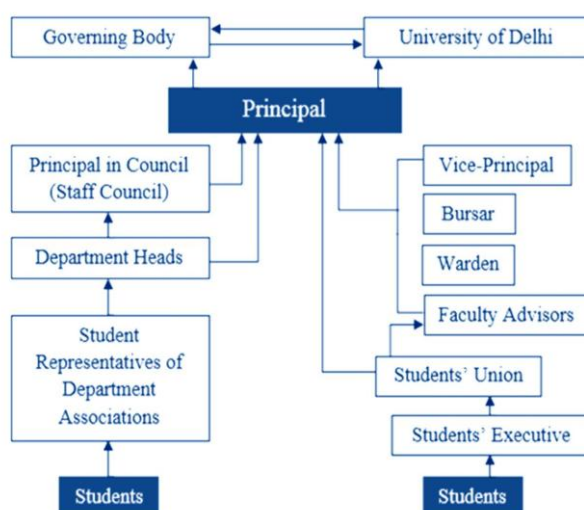
GB approves it, these plans are then materialized. In last four years the college had massive infrastructure expansion. It has built an extra floor from the funds received by UGC. 15 new class rooms, a medical room, staff lounge, 2 lifts and an Amphitheatre.

### 6.2.3 Describe the internal organizational structure and decision making processes.

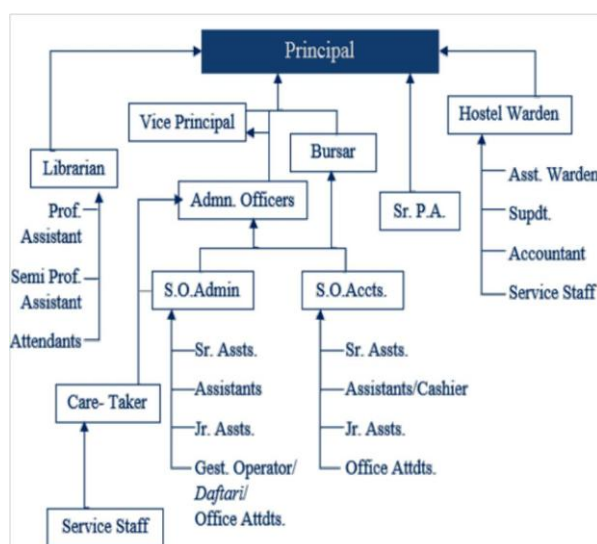
According to ordinance XIII of the University of Delhi, the Principal and two faculty members are part of the Governing Body. The Governing Body takes important decisions related to finance and administration. The IQAC functions as a quality monitoring and quality implementation unit of the college. A number of academic and administrative committees are in place for effective implementation of the action plan. The committees report to the principal. The staff council is assisted by the Principal and the Bursar and work according to ordinance VIII of the University of Delhi.

Please refer to the figure below for org chart.

Structure of Academic Organisation



Structure of Administration





**6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following**

- **Teaching & Learning**
  - Introducing ICT facilities for providing quality teaching-learning experience
  - Empowering teachers by providing them training on latest ICT tools and techniques
  - Encouraging faculty to participate in FDP/FIP/Leadership development programs
  - Implementing student-centric learning environment with group discussions, projects etc.
  - Support beyond classroom hours with tutorials and/or remedial classes, and promote the advanced learners with exciting challenges and innovation projects
- **Research & Development**
  - Promote an encouraging research culture among the students and the faculty
  - Encourage the faculty to apply for and undertake Major and/or Minor research projects
  - Create a well-established research center in the institution
  - Create specific research expertise in the institution
  - Generate revenue through consultancy services
  - Provide full autonomy to the Principal Investigator for smooth implementation of the research projects
- **Community Engagement**
  - Engage with communities beyond the campus through NSS and other college societies
  - Quality improvement in teaching learning by better understanding the need of the community through constant interaction with the community stakeholders
  - Organize extension activities such as *Padhaku* (education for the underprivileged) where every volunteer spends three hours per week from 3 pm to 5 pm to teach the underprivileged students from nearby slum areas.
  - Cyclothon, an annual event organized by *Haritima*, the environmental Society to create awareness regarding various environmental issues, etc. to connect with the community.
- **Human Resource Management**
  - In addition to the standard benefits available to the faculty from UGC, the college provides additional support to faculty involved in active research such as granting study leave, sabbatical leave, reimbursement of registration fees for seminar/symposia/conference etc.
  - Faculty is also encouraged to participate in refresher/ orientation courses/ FDP/FIPs/ ICT workshops.
  - In case the faculty strength is less than the approved strength, ad hoc and qualified guest faculty is also recruited.
  - Staff development programs are conducted for faculty.
  - Advanced ICT based facilities such as a WiFi-enabled campus, direct connection to University of Delhi e-library etc. are provided to the faculty
  - Yoga classes are also organised for students, teaching and non teaching staff members ensuring their physical and mental well-being.

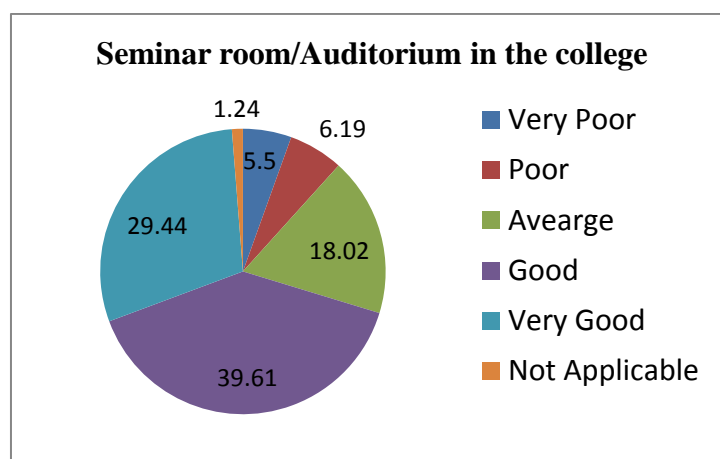


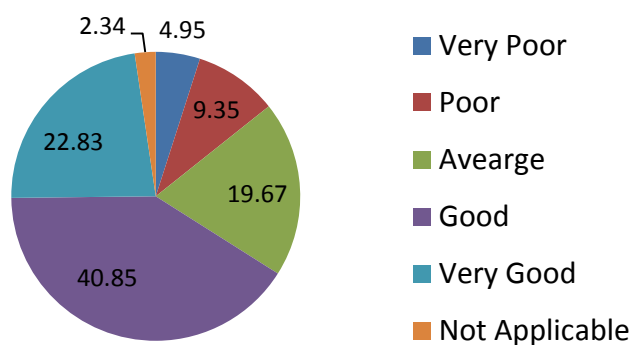
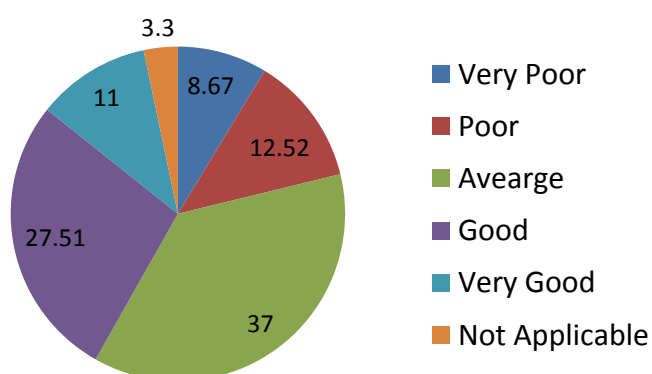
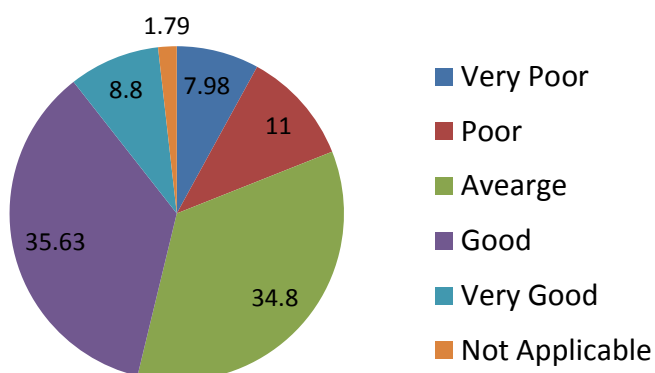
- ICT skills of non-teaching staff are periodically updated through workshops/ training programmes
- Laboratory staff is also exposed to latest laboratory techniques pertaining to their subject by motivating them to participate in various training programmes organised by various institutes
- **Industry Interaction**
  - The placement cell of the college interacts with the industry and arranges for campus placement of the students.
  - Eminent experts from the industry are invited to the college to deliver lectures and presentations.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

- Feedback forms for teaching assessment and evaluation are available on the college website. Students are encouraged to fill up these forms so as to improve the academic performance and quality
- A similar procedure is used for administrative activities and for feedback on that aspect.
- Informal feedback is also collected during the staff council meetings, meeting with the General body, and with the students. Minutes of these meetings are reported back to the Principal.

**Fig 6.1: Feedback Results**



**Societies for students in the college****Students support and welfare in the college****Library in the college**

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

- There are a number of committees and sub-committees in the institution for effective implementation of various action plans.
- As per the guidelines from the University of Delhi, the faculty members are invited to be the members of the Governing Body.
- Feedback is taken from the faculty members and non teaching staff and forwarded to the management as necessary.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

The following are the resolutions made by the Governing Body in the last year and the status of the implementation of such resolutions:

- In pursuance of Resolution No 7 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the Ad-hoc appointments of Assistant Professors in the College.
- In pursuance of Resolution No 8 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the retirement benefits to the retired staff members.
- In pursuance of Resolution No 9 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the study and other leave cases of faculty.
- In pursuance of Resolution No 10 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the voluntary retirement of Dr. Indira Santhanam.
- In pursuance of Resolution No 13 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the revised budget for the year 2013-14 and Budget estimate for the year 2014-15 for the college.
- In pursuance of Resolution No 14 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and discussed the observations made by CAG. All the compliances as per CAG observations were ensured and communicated to CAG.
- In pursuance of Resolution No 16 of the Governing Body in its meeting held on 30.07.2014, on recommendation of the Principal, the Governing Body considered and approved the Yoga Science classes in the college.
- In pursuance of Resolution No 3 of the Governing Body in its meeting held on 10.01.2015, requested to get an internal audit by DAV CMC to verify the compliance of the observations made by CAG during their last audit.
- In pursuance of Resolution No 4 of the Governing Body in its meeting held on 10.01.2015, on the recommendation of the Principal, the Governing Body considered and approved the premature retirement of Dr. K K Bahri from 31.01.2015
- In pursuance of Resolution No 3 of the Governing Body in its meeting held on 30.07.2015, Dr. S K Sama was elected as Chairman and Shri. Shrideep Omcheri as treasurer of the Governing Body.



- In pursuance of Resolution No 4 of the Governing Body in its meeting held on 30.07.2015, Dr. Rama, Associate Professor was appointed as acting Principal of the college w.e.f. 01.08.2015.
- In pursuance of Resolution No 4 of the Governing Body in its meeting held on 02.09.2015, a farewell was given to the outgoing officiating Principal Dr. V K Kawatra by the Governing Body.

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?**

University of Delhi has no such provision as of now.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?**

A Grievance Redressal Committee is in place to address any grievances. A grievance collection box is placed outside the Principal's room. A link is also provided in the college website. All grievances submitted are reviewed, discussed and necessary actions are taken.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

**Table 6.1: Court Cases**

S.No	Title & Details	Advocate	Status
1	Aditya N Prasad V/s University of Delhi & Ors. CWP No. 12475/2009	Pawan Kumar Aggarwal	Disposed Reg. Internal Marks BA (H) History
2	Jagesh Chand Mishra V/s Chief Commissioner for person with Disabilities WP(C) No: 8667/2010	Pawan Kumar Aggarwal	Pending Reg: Selection For the post of Scientific Assistant
3	Master Aditya Through Vijay Kumar Legal Guardian V/s University of Delhi & Ors.	Pawan Kumar Aggarwal	Pending Reg: Sports Quota Admission
4	Sonu V/s Hansraj College WP(C) No: 4233/2013	Pawan Kumar Aggarwal	Pending Reg: Termination from Job Duties
5	Mangal Nath V/s University of Delhi & Ors. WP(C) No: 6009/2011	Pawan Kumar Aggarwal	Pending Reg: Switch over to Pension Scheme



6	Bablu Kr Chaudhary V/s University of Delhi&Ors. WP(C) No: 7325/2011	Pawan Kumar Aggarwal	Pending Reg: Selection of Lab Attendant
7	Anami Bhattacharya V/s Hansraj College & Ors.	Pawan Kumar Aggarwal	Pending Reg: Admission on Sports Quota Basis
8	Dr. S.K Laroia & Ors V/s Union of India & Ors. WP(C) No: 6762/2011	Pawan Kumar Aggarwal	Pending Reg: CPF to GPF Scheme
9	Mahaswetta Saikia V/s University of Delhi & Ors. WP(C) No: 1050/2011	Pawan Kumar Aggarwal	Disposed on 9/8/2012 Reg: Appointment for the post of Assistant Professor
10	Uday Kiran Suri V/s University of Delhi & Ors. WP(C) No: 5478/2012	Pawan Kumar Aggarwal	Pending Reg: Admission Under Sports Quota
11	Dr. I J Sharma & Ors. V/s Union of India & Ors. WP(C) No. 6739/2011	Pawan Kumar Aggarwal	Pending Reg: CPF to GPF Scheme
12	Bal Kishan V/s Hansraj College Filing No: 43935/2013	Pawan Kumar Aggarwal	Pending Reg: Reversion of Post from Sr. Assistant to Assistant
13	Dhruva Rajput V/s University Of Delhi & Ors. WP(C) No: 878/2013	Pawan Kumar Aggarwal	Pending Reg: Denial of Appearance in BSc (H) Physics Exam
14	V.K Bhasin V/s Hansraj College Filing No: 56105/2013	Pawan Kumar Aggarwal	Pending Reg: Refusal to pay penal rate of rent Of HRC Staff Quarters
15	DU SC/ST/OBC Teacher's Forum & Anr V/s University Of Delhi & Ors. WP(C) No: 803/2014	Pawan Kumar Aggarwal	Pending Reg: Appointment of Asst Prof working on Adhoc Basis
16	Rohit Sharma V/s State & Ors. Filing No: 1886/2014	Pawan Kumar Aggarwal	Pending Reg: Grant of Succession Certificate
17	Shivam Bakshi V/s Hansraj College & Anr. WP(C) No: 7278/2015	Pawan Kumar Aggarwal	Pending Reg: Admission under ECA Quota

**6.2.1 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort Re: Curriculum, Teaching, Learning Resources**

An online link is provided in the college website to obtain feedback from the students and other stakeholders on various institution provisions. The report is automatically analyzed and the recommendations are presented to the management.



### 6.3 Faculty Empowerment Strategies

#### 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

- Faculty is encouraged to participate in the FDP/FIP and other workshops.
- Study leaves are arranged for the faculty engaged in active research.
- Latest ICT tools and techniques are made available for the faculty.
- Faculty is encouraged to participate in interdisciplinary projects.
- Inter disciplinary lectures are arranged among the faculty to promote knowledge sharing among the students.
- Workshops are organized for non teaching staff for ICT awareness.

#### 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- There is a formal system of conducting orientation/refresher course in the university. It is primarily facilitated by CPDHE which works as a specific arm of University of Delhi. It is mandatory for faculty to undertake minimum number of such programmes. Besides CPDHE, other universities like JNU, JMI also offers such courses on exchange basis.
- CPDHE also conducts workshop on teaching methods to equip the faculty with latest pedagogy in teaching.
- Adequate infrastructure such as wi-fi campus, access to internet, computer laboratory, direct connection to the library of the University of Delhi etc. are provided to the faculty.
- The faculty is exposed on various assignments like wardenship for hostel, superintendentship for theory examination, co-ordinator for central evaluation center etc. on rotational basis. This results in job enrichment as well as instills a sense of confidence.
- The administrative head of various job profiles is assisted by members, taken from teaching and non-teaching staff. This helps in building a healthy team spirit in the college.
- Complete autonomy is provided to the Principal Investigator of the research projects.

#### 6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

Every faculty has to submit a Self Assessment Form reflecting the information pertaining to the publications, seminars/symposia/conference attended, paper presented, lectures delivered, major/minor research project completed by them. Same is evaluated at the time of promotion by a committee of experts.



**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

The performance appraisal system for the teaching staff is in line with the performance appraisal system followed by the University of Delhi. The outcome is reviewed by the management and is communicated to the faculty as necessary.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

There are a number of schemes available for both teaching and non teaching staff, such as Medical re-imbursement for serving and retired employees and their dependents, children education allowance, advance for purchase of four/two wheeler, festival advance (to non teaching staff only), advance for purchase of computer, laptops are provided to faculty members (to be returned to the college on annual basis), Child care leave for female employees having children up to the age of 18 years.

Following is the data for various welfare schemes availed by the teaching and the non teaching staff of the college in the last four years.

Medical Re-Imbursement		
Year	No of Employees Benefitted	% Benefitted
2011-12	208	100
2012-13	206	100
2013-14	210	100
2014-15	204	100

Children Education Allowance		
Year	No of Employees Benefitted	% Benefitted
2011-12	97	100
2012-13	103	100
2013-14	106	100
2014-15	99	100



Advance for purchase of Four/Two wheeler		
Year	No of Employees Benefitted	% Benefitted
2011-12	2	100
2012-13	4	100
2013-14	7	100
2014-15	4	100

Festival advance (only to the non-teaching staff)		
Year	No of Employees Benefitted	% Benefitted
2011-12	54	100
2012-13	61	100
2013-14	62	100
2014-15	53	100

Laptops issued to the faculty		
Year	No of Employees Benefitted	% Benefitted
2013-14	26	100
2014-15	26	100

Child care leave		
Year	No of Employees Benefitted	% Benefitted
2011-12	54	100
2012-13	61	100
2013-14	62	100
2014-15	53	100

#### 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- Faculty is provided with facilities such as payment of registration fees for seminars and conferences, nomination for workshops and conferences etc.
- Academic autonomy is provided to the departments.
- Autonomy is provided to the Principal Investigator of research projects.



### 6.4. Financial Management and Resource Mobilization

#### 6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

- Internal audit is conducted every year.
- Statutory audit is also conducted every year.

#### 6.4.2 What are the institutional mechanisms for external and internal audit? When was the last audit done and what are the major audit objections? Provide the details on compliance

Internal audit is conducted every year from the auditors arranged by the Governing Body. The external audit was conducted by the CAG of India for the first time in the year 2014-2015. The last audited statement is available with the S.O. Accounts.

#### 6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

The major sources of receipts/funding for the institution are as follows:

##### Grant from UGC

- Non-Plan Grant for maintenance of College, Staff Salary and allowances, Staff related expenses, retirement benefits
- Plan grant for planned project as per 5 year plan guidelines
- Grants for travel and research projects
- Special grant for building projects

##### Grants from University of Delhi

- Grants for Innovation Projects

##### Grants from Department of Biotechnology

- Grant for Star College Programme

##### Grants from Department of Science and Technology

- Grant for INSPIRE Internship Programme
- Grant for research projects
- Grant for travel to attend conference/seminar

Fee collection from the student and the deficit is met by the Governing Body.

Below is the graphical representation of the college budget for the last four years.



Fig. 6.2: Budget for the College (Rupees In Lakhs)

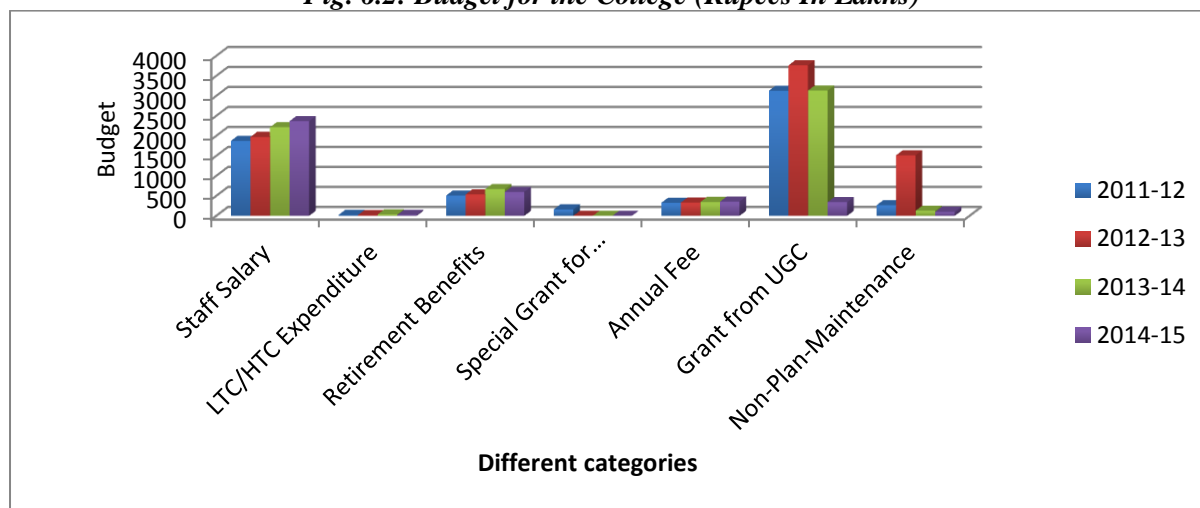


Table 6.2: Budget for the College (Rupees In Lakhs)

	2011-12	2012-13	2013-14	2014-15
Staff Salary	1873.53144	1973.58999	2214.75674	2367.86725
LTC/HTC Expenditure	21.34434	20.93290	34.64866	22.63207
Retirement Benefits	507.22682	536.43659	667.57042	598.39075
Special Grant for Building	160.00	Nil	Nil	Nil
Annual Fee	325.56800	332.60850	346.35300	355.68960
Grant from UGC	3128.72697	3762.81000	3132.74000	343.45000
Non-Plan-Maintenance of Colleges	264.93886	1514.21055	128.49670	99.68977

#### 6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any)

Grants from Department of Biotechnology

- Grant for Star College Programme

Grants from Department of Science and Technology

- Grant for INSPIRE Internship Programme
- Grant for research projects

### 6.5 Internal Quality Assurance System (IQAS)

#### 6.5.1 Has the institution established an Internal Quality Assurance Cell (IQAC)?

- a. If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

The IQAC was established in August 2015. However, since the inception of college Staff council through its various committees has been working as the Quality Council of the



institution. These committees have been looking at various facets of the college viz. academic, extra-curricular, administrative, extension services and financial aspects. Some of the important committees are Admission Committee, Time Table Committee, Workload Committee, Seminar Committee, Internal Complaints Committee against Sexual Harrassment.

The objective of IQAC/Committees constituted by the Staff Council is as follows.

- Monitoring quality of the institution processes.
- Implementing quality initiatives, including ICT facilities to improve the quality of Teaching-learning.
- Implementing quality measures in line with the Vision and Mission of the institution.

The IQAC keeps in touch with all committees and monitors their functioning.

**b. *How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?***

Decision and Date	Approved by Principal	Current status
30.09.2011 Members of Attendance Committee would be Teachers-in-charge of various departments	Yes	Implemented
Academic affairs committee: should include long-term and immediate prospective in infrastructure development for academic purpose	Yes	Implemented
18.05.2012 A review committee to be formed to assess the efficacy and number of the committees in the college.	Yes	Implemented
27.09.2012 Introduction of lunch break	Yes	Implemented
A committee was constituted to discuss the proposal for common freshers' and farewell for the entire college in order to save time.	No	
20.05.2013 A new committee named Publication Committee was formed to look after the publication of Prospectus Annual Report etc.	Yes	Implemented
Central Purchase Committee (CPC) to be constituted for purchase of stationary and computer peripherals	Yes	Implemented
22.05.2013 A new committee: Special Category Admission Enabling committee to look after SC/ST/Pwd category students	Yes	Implemented
26.09.2013 It was proposed that the college will offer a Course on Japanese language	No	
24.02.2014 EOC and SC/ST committee to look after the introduction of Remedial classes for SC/ST/OBC and minority category students.	Yes	Implemented
17.04.2014 Introduction of short term courses on Hindi patrakarita and/or Journalism subject to the approval of University	Yes Yes	Approval from University is pending
Institution of Dr. Rachna Sharma Memorial Awards for excellence in Fine Arts /ECA	Yes	Implemented



**c. *Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.***

- College complaints committee has external members on it. The committee holds meetings as and when required.

**d. *How do students and alumni contribute to the effective functioning of the IQAC?***

- The college has a well established Alumni association. Alumni meets are conducted regularly and the alumni contribute financially and otherwise towards the development of the institution.
- The IQAC also has members from alumni and from the students body. The students also help in formulating the quality strategies of the institution keeping in mind their requirements.

**e. *How does the IQAC communicate and engage staff from different constituents of the institution?***

There are a number of committees in the Staff council such as:

- Admissions Committee
- Academic Committee
- Research Committee
- Library Committee
- Timetable Committee
- Workload Committee
- Academic Affairs Committee
- Seminar Committee

Each committee contains members from the faculty and in some cases, members from the management. The IQAC interacts with the committee and takes feedback on quality initiatives. The feedback is analyzed and recommendations are made to the management as well.

**6.5.2 *Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.***

- There is an integrated framework for quality assurance. At Hansraj College, quality is perceived as the most important component for the overall growth and development of the institute. Prior to the establishment of the IQAC, the Staff Council, along with the academic and administrative committees used to function as the Quality Cell of the institution. Quality policies are formed by faculty members as well as administrative staff for good governance of the college.
- At the beginning of the session, an integrated academic and administrative calendar is created. Academic and administrative audit is conducted to ensure adherence to the academic and administrative calendar.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.**

- Faculty is encouraged to attend workshops and conferences in and around Delhi.
- Faculty is also encouraged to attend in house workshops, seminars and conferences.
- Eminent researchers are invited for presentations, guest lectures and workshops.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?**

Yes, the college undertakes periodic academic audit of the academic provisions. All teachers-in-charge hold periodic meeting in every semester to take stock of the syllabi covered by various members of the department. Members also discuss curriculum based issues and other related matters to improve the functioning of the department.

The outcomes are very useful to improve the institutional activity as the issues arising out of the minutes are noted carefully and addressed promptly.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

Quality policies of the institution are aligned with the guidelines from the University of Delhi, The examination schedules, co-curricular activities and extension activities are organized as per the guidelines from external authorities.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

- Academic calendar and examination schedule is prepared at the beginning of the session and shared with the students.
- The Teachers- in- charge of every department review the progress and takes corrective measures such as arranging extra classes as necessary.
- The examination results are reviewed to assess the quality of teaching.
- The admission data is analyzed and reviewed every year.
- Feedback is taken from all stakeholders for various analysis. Suitable recommendations are made to the management if required.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

- The IQAC organizes regular meetings with all stakeholders.
- The teacher in charge of every department conducts orientation for new students before the new academic session begins.





- Various academic policies and action plans are also communicated to the alumni during alumni meet.
- Students, faculty and alumni are members of various committees taking important policy decisions.
- The college has a well placed mechanism to implement the RTI Act of 2005 in good spirit.



## **CRITERION VII: INNOVATIONS AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?**

*Haritima*, the society for spreading environmental awareness and inculcating sensitivity to environmental issues, has been making many innovative interventions in the preparation of the green audit of Hansraj College. Located adjacent to Kamla Nehru Ridge, North Delhi and spread over a huge campus, the college has an adequate green cover. Besides *Haritima*, the College Garden Committee has the mandate of maintaining all the college lawns, takes care of the plantation of trees and the seasonal flowers and potted plants that are used as indoor plants and in decorating the corridors of the college. With assistance from the Department of Botany and in collaboration with *Haritima*, we at Hansraj college give adequate attention to selection of trees for plantation on campus.

- A Green policy has been formulated for the college by the society that is approved by the Staff Council.
- Green audit is conducted by the internal mechanism of the institution by taking the recommendations in the format into account.
- The carbon footprint of the members of the teaching and non-teaching staff were collected by a group of students undertaking a project in their paper entitled Environment Management and it was compared with the colonies across Malkaganj and Kamla Nagar. It was clear from the data obtained that the Hansraj community is concerned about the environment.
- The tree census has been carried out and a video presentation was prepared to educate the students and the staff about the tree flora that was appreciated by Vigyan Prasar, an autonomous organization of DST (Department of Science and Technology). The video is available on YouTube.
- Major initiatives undertaken by *Haritima* have also featured in a weekly Science Programme, Science this week, Lok Sabha Channel and Doordarshan.
- Many of our initiatives are supported by the Department of Environment, Government of the National Capital Territory of Delhi.

#### **7.1.2 What are the initiatives taken by the college to make the campus ecofriendly?**

- **Energy Conservation**

The college has played a proactive role in energy conservation by always leading campaigns for Earth Hour. Since 2005, all the electric switches have stickers with reminders such as “Switch off the electricity and fans when not in use”, “Save Energy for Future” etc. Sincere efforts have been made to take advantage of passive solar energy. The rooms are well lit with many windows so that during the day time minimum use of electricity is incurred. The appliances and instruments procured are energy efficient and 5 Star rated. Regular servicing of the electrical appliances and equipment used in laboratories is done to reduce electricity load. Since the college has residential facilities available, the hostel inmates are also advised to follow the norms strictly. Students are penalized for wasting electricity.



- **Use of Renewable Energy**

The college Hostel has installed solar geysers to provide hot water for the kitchen and washrooms. For lighting the streets, solar lights are installed.

Education and awareness on using renewable sources is the prime area of focus. Students have run campaigns to educate the families and students living on campus to wash their clothes on their own and use solar energy for drying of clothes instead of using dryers in washing machines. The campaigns have been well received.

- **Water Harvesting**

The college has significant provisions for rain water harvesting. It has been suggested that since the college is in the ridge area, the water table is very high. And the area is a catchment area; special efforts are not required, therefore, for harvesting. However, care is taken to reduce the wastage of water. Extra rain water is drained into flower beds and used for irrigation.

### ***Efforts for Carbon Neutrality***

Our efforts towards carbon neutrality are an ongoing endeavour. Students of the college carried out a survey based project. This exercise was very useful as it helped the college prioritize action in areas of greatest environmental impact or conservation. Efforts have been made towards saving conventional energy through economy of use and tapping alternative and renewable sources of energy. Initiatives towards car-pooling are another step in this direction. Students are advised to use e-rickshaws from the metro station to college. The students of the college have led various rallies to encourage students to use cycles for travelling short distances.

Our college is the greenest campus in the university. Adequate tree cover has been maintained. We have added lustre to the campus by planting flowering trees all across the campus. This also is another step to help in carbon sequestration.

An innovation project “Development of zero discharge eco-friendly, affordable and carbon neutral bio-fuel using in house horticultural waste” has been carried out by Dr. Manoj Kumar, Dr. Anand Sonkar, Dr. Aparna Garg and Dr. Amar along with 10 students from various science streams. The facility for converting waste to fuel has been developed in the college that is being used by college students to ensure that the waste is converted into wealth. The efforts of the entire team have been recognized by the university by awarding the idea at the Intercollege Festival Antardhwani.

### **Plantation**

Plantation drives are a regular feature in the college. Students have been involved in plantation drives that are carried out off and on campus. *Haritima* and NSS unit of Hans Raj have been involved in carrying out the task of plantation in and around the college campus. Students of Botany have also been involved in the restoration of Kamla Nehru Ridge, an initiative undertaken by the Centre for Management of Degraded Ecosystems, University of Delhi. Species diversity is maintained by taking into consideration the two parameters of species evenness and species richness. The flora is well represented by tall trees, shrubs, climbers and herbaceous species. Many medicinal plants are also planted in



the nursery area and in the garden. Our college also has a Botanical Garden where plants required for laboratory and class room work are planted. A Green House has also come up where annual foliage plants are maintained.

### **Hazardous Waste Management**

Hansraj College has science departments that have trained teaching and non-teaching staff. The teachers and the non-teaching staff are well aware about the hazards of chemicals and other associated products. Chemicals are handled carefully and disposed of following proper standard procedures. At the Start of the academic year, the staff and students are instructed to look at the labels, taught to read the labels on the chemicals and taught the best ways to handle these. No research work is carried out, using any harmful substance. However, the teachers instruct the students about the precautions students need to take while handling any chemical and these instructions are strictly followed.

### **E-Waste Management**

Hansraj College environmental awareness society has undertaken various initiatives to tackle the e-waste issue. A campaign launched by Nokia “Planet ke Rakhwale” was held in the college. A unit was set up for e-waste collection where students were advised to drop their damaged phones, batteries, CDs etc that can cause damage to the environment.

A seminar was held in association with E-Parisar (2010-11), Bangalore to make students aware about the problems, handling and management of e-waste. A panel discussion on handling of e-waste was also held in the college premises.

Students of Botany (Hons.) conducted a survey based project in Delhi to study the problem and management of electronic waste in Delhi. Students also attended a webinar on e-waste and participated in various seminars.

### ***Some Other Environmental Initiatives***

Hansraj College has been a leader in various environmental issues. College students have undertaken projects to compare the “Handling of Hospital Waste” in and around North Campus. Students have compared whether the norms laid by Government of India are being followed in Government and private hospitals in Delhi. Studies at New and Old Delhi Railway station on solid waste management have also been carried out. The faculty has been involved in spreading awareness by writing on environmental issues in various science magazines.

### **“No to Firecrackers” Diwali Campaign**

As the air pollution is playing havoc with the health of people in Delhi for last few years, *Haritima* has played an important role in educating people staying in the vicinity of the college regarding the harmful effects of pollution. *Haritima* decided to bring a change on last Diwali through posters, slogans and skits and began a ‘No to Fire Crackers Campaign.’ To spread awareness among children and elders across the residential areas, a rally was organized. Posters were put up all around the college. The anti-cracker drive also served as a mode of spreading awareness regarding air-pollution in Delhi and its consequences on human health.

We also celebrate World Ozone Day in association with Millennium India Foundation, Delhi and organize paper presentation contests on the occasion.



Our annual fest ‘Prakrati Kumbh’ is a unique student festival that sees participation in huge numbers. Students get an opportunity to participate in a variety of programmes that are responsible for creating environmental sensitivity as well as awareness. Street Plays have been organized during the fest to create awareness about the growing pollution menace. The Ministry of Earth Sciences has also supported the activities carried out by *Haritima*.

*Haritima* has invited eminent scientists and environmentalist from other colleges and organized various seminars.

Mr. Rajender Singh, the water man of India, Prof. A. K. Bhatnagar, Dr. T.V. Venketeswaran, Dr. BC Sabata, Er. Anuj Sinha, Mr. Pallav Bagla and Mr. P.C. Jain have been invited to the college to share their knowledge and expertise on various environmental issues. Besides these, many non-government organizations were also invited to talk on various issues that are pertinent.

## **7.2 Innovations**

### **7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.**

#### **Teaching-Learning**

In recent years, Hansraj has taken up a series of initiatives and designed interdisciplinary collaborative programmes, special lectures, seminars, symposia and field trips to foster an academically vibrant environment in college. Some of these innovative initiatives are:

#### **ICT and Innovative Teaching-Learning Pedagogies**

Our college understands and appreciates that with the changing scenario, the outlook towards the teaching-learning process has to be changed. Besides the normal procedure of classroom lectures by chalk and talk method, ICT technology is being taken advantage of to integrate the varied media for the teaching-learning process. Students are encouraged to give powerpoint presentations on selected topics so that they learn to organize and filter the information already available. This has helped improve the understanding of students on various topics and keep them updated with their cent literature available on the topic. Our laboratories in all Science Departments are well maintained and are ICT enabled. We have latest microscopes that have been procured recently to keep pace with technology.

The students use binoculars, compound and dissected microscopes with camera attachments and click photographs of their slides. Bioinformatics is the modern scientific discipline where a lot of emphasis is laid on use of computers to interpret the enormous data that is available and apply it to other disciplines. Many new sophisticated instruments have been purchased by Departments of Physics and Electronics to meet the requirements of B.Tech. courses. We also have latest instruments such as centrifuges with software update facilities. Students are also encouraged to improve their oral and communication skills by giving presentations.

ICT enabled Infrastructure and Administrative Processes are maintained well, the details of which are provided in earlier annexures.



**DIY (Do It Yourself)** aspects also encouraged in science laboratories. Students are encouraged to design experiments to test the hypotheses. This has had a positive impact and helps in fostering scientific aptitude amongst students. The Departments of Commerce and Economics have been at the forefront in updating students about new facets of economy and develop their thinking abilities by assigning real world problems as projects where students work in groups and suggest innovative ideas on tackling various challenges.

Hands on activities have been designed for students to help students relate whatever they are taught in the theory components of their subjects with practicals, lecture series and panel discussions.

Special lectures and panel discussions have been organized on various topical themes to help students understand issues beyond their curriculum

### **Field Trips**

Field trips and excursions are important for science education and offer an enriching experience to the students. Such trips engage and entertain students to make their educational experience more relevant, memorable and meaningful. Effective field work, and residential experience in particular, can lead the individual with improved social skills and ability to negotiate challenges. With an emphasis on learning both within and beyond the classroom, field trips are increasingly being seen as an integral tool of experiential learning.

Science Departments organize visits of students to various national institutes and labs. The students are also taken to factories so that they have a feel of things that are taught in the class. These visits expose students to various other aspects of education and also inspire them to take up higher studies.

Students of History, Sanskrit and Humanities also visit various historical places, museums, art galleries and monuments to understand various aspects of art, history and civilizations. Students go for NSS and NCC camps that are mandatory where they learn social skills, leadership qualities and soon. Our students have been part of NSS trips organized by University of Delhi.

In the past four years students have visited various places. Gyanoday Express, an educational train journey, has been a unique initiative by DU where majority of girl students participated from Hansraj College and did on-board projects. Some of our students also won prizes in various categories.

Students representing SPIC MACAY chapter were part of the International Convention held in Mumbai recently (2015).



### 7.3 Best Practices

#### 7.3.1 Elaborate on any two best practices as per the annexed format which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

### **BEST PRACTICES**

#### **Two Best Practices**

##### **A. Education for All (*Padhaku*)**

A unique concept of Hansraj College, *Padhaku* works and leads the institute by a resolution, “**Academics is our strength and simplicity is our motto**”.

The concept Started with 5 students of NSS and was extended to 30 students on the campus. The idea was generated by students who thought of doing something innovative in NSS. They thought spreading education and awareness is the key to achieve many things and hence began *Padhaku*. The target beneficiaries of this concept are the under privileged school children of nearby slums.

These children were brought together on a platform and books were distributed to them. Srithi, Suman, Vishesh, Nikhil and Ankit came together and began teaching them under trees. Each student was allocated 6 children so that they would be taken care of properly. Very soon the movement caught up and spread.

##### **Goal**

For years, Hansraj College has emphasized helping students from underprivileged backgrounds so that they understand the importance of education. The idea is nurtured by our motivated and academically driven faculty and students. All the stakeholders endeavour to enthuse the needy and create their interest in developing skills, and have been working towards getting and giving the best to them.

As an institution, this core area has ruled the charts of our endeavours and the entire college community has been working towards achieving its set goals.

We have pledged that this area should never take a back seat. The volunteers use innovative teaching methods in order to keep an interest in learning alive among the target strata.

##### **The Context**

The programme called *Padhaku* was started by the students of the college as part of our outreach activity. The concept followed herein is “Beyond Classrooms.” It took off as an initiative by a few third year students who decided to teach unprivileged students in and around the campus. The initiative became a rage, with students sitting around the canopies of trees teaching children. The administration was happy to see the motivation of the students and rendered all possible help for the noble cause. From children to uneducated women to rickshaw pullers, connecting every segment of society has been the motto. “You, not me” became an anthem for the students, and through various methods, we started educating these people on various social, political and personal issues.





The results have been encouraging enough to motivate more and more students to get associated with the idea.

### **The Practice**

Students are encouraged to learn from day to day activities and through various other means. Through film screenings, our students are made aware about various topics that are relevant and difficult to comprehend.

It is ensured that students find relevance and understand the purpose of knowing and understanding the topics given in the syllabi and relate to them. Vibrant class rooms where teachers try to reach out to every student are the strength of our college. For slow learners, efforts are made at individual level to help them by providing easily comprehensible reading material and other ways. Teachers always strive to deliver the best in the class rooms through modern pedagogy.

Students are continuously mentored on their weak points. Due emphasis is given to written and spoken English so that the students from underprivileged background do not develop any inferiority complex and are able to understand the subjects that are taught.

*Padhaku* has been a vision in the true sense of the word for almost everyone associated with it. Some members of the college Started contributing stationery items for the kids. School bags and free notebooks started coming in from various sources. So these children started receiving incentives and getting educated as well. In 2012, in order to enhance the enrollment, *Padhaku* members started rewarding the children who would bring along a new child. *Padhaku* Anthem was written and sung in the college auditorium.

Gradually *Padhaku* did not remain only a forum for extra coaching for the students. Innovations in this project have kept it going. We started giving presentations on various aspects of health, hygiene, cleanliness etc. The programme, therefore, is a holistic programme in the truest sense of the term.

### **Evidence of Success**

The enrollment increased as the students started spreading the word outside. The children of the non-teaching staff of the college were enrolled as *Padhaku* students. Students of neighbouring Dhobi Ghat, a slum, were also roped in. Initially, students had to work really hard in bringing these children to the classes. However, results started showing. Many of the children enrolled in *Padhaku* started gaining an extra edge in their formal schools. They started performing better.

From 30 students in 2006, the numbers grew to 70 in 2008, in the year 2009, 170 students were registered: by then, students of class 11th and 12th were also enrolled. Some of the brightest students of the college devoted time to coach students and mentor them and helped them with Mathematics and English. This has helped some of these children to perform phenomenally well in their CBSE Board exams.

As construction activities were going on in the college on account of OBC expansion, many children used to roam around in the college campus because their parents were



employed as labourers in these construction activities. These children also got this opportunity to realize the feel of a school.

NSS students undertook a novel initiative of taking the children to various places in Delhi so that they could get a glimpse of the city they are living in. Many such excursions have been organized for them.

### **Problems Encountered and Resource Required**

The biggest challenge in the project has been, and continues to be, convincing the poor students of nearby slums to join the project. In fact, motivating them to continue is a more difficult task.

Convincing poor mothers about the safety of girls has always been a Herculean task. These mothers, very truly, have reasons to be scared. Further, many of our target students especially girls, who needed the education were involved in some work to get money to run their households. Asking the parents to do away with these earnings of child labour for the sake of a long-sighted education has often not received much support.

Inadequate funds have always been an issue in continuing the project. Even if the parents get convinced to send their children, they expect, at least, that we do not ask them to pay for the running expenses on books and stationery. The volunteers have been constantly trying to involve some sponsors or NGOs so that this noble activity can be continued.

## **B. Leadership through Proactive Participation**

### **Goal**

The College has been trying to build leaders with team spirit. The target is to help students to look beyond the curriculum and helps them to integrate their classroom knowledge with their social intelligence, resulting in an all-round education. The development of individual skills in leadership and organization, coupled with collective skills like team-work and financial management is sure to help students overcome all the hurdles of the competitive world. Students are also trained in disaster management.

### **The Context**

Our students are adept and possess skills and abilities that help them connect ideas and concepts across various disciplines. Collaborative tasks are assigned to the students where students with different learning abilities and aptitudes are grouped together so that they learn from one another as well. This also fosters the skills of team work, an essential element during liaison with different sectors of industry for sponsorship, publicity, and participation. This becomes a handy asset in both their personal and professional lives.

The developed skills are put to actual use when the students are required to take charge and involve themselves with all the events and seminars conducted. The College also tries to conduct programmes specifically designed for personality development and communication skills.

**The Practice**

The most important practice is instilling a sense of social responsibility in the students, and it is done through the various societies of the college that any student can join. What is impressive about these societies is that the students are the primary stakeholders, and all such initiatives are taken up by students themselves. Each department of the college, as well as all the societies have their own individual 'fests' that gives like-minded people from across the university a platform to communicate and share their ideas and passions.

Students are motivated to involve themselves in various societies and activities by giving the controls of learning process to them. They are allowed to participate in discussions, are given assignments of their choice and interest so that they become self-motivated learners. The results of the tasks assigned are discussed in the classrooms so that students learn the skill of purposeful learning.

As our college is one of the largest constituent colleges of University of Delhi, catering to over 5000 students representing almost all the regions of the country, we are a microcosmic representation of India. The students speak various regional languages, follow different faiths and are often from various economic groups. All the castes are well represented by students as well as staff. Despite so much of heterogeneity, Hansraj is one single unit. Bringing students from varied cultures and backgrounds on a common platform of today's competitive world is an ever ongoing endeavour of the College.

**Evidence of Success**

All this helps students to look beyond the curriculum; it helps them integrate their classroom knowledge with their social intelligence, resulting in an all-round education.

This has also resulted in strengthening Hansraj College's belief in the equality of all students, and has facilitated in bridging the gaps of inequality. It is driving Hansraj to raise the bar and aspire for a bigger and better role in universal education.

**Problems Encountered and Resource Required**

Funding for organizing such activities and having a good response in participation is a challenge. The volunteers have to rely on sponsors on a regular basis. As the number of students targeted for grooming in their grey areas is also rising with the overall strength of the students, the college requires more infrastructural resources to achieve the desired results. A few multi-media rooms of good capacity would be a great help. It is expected that the infrastructure expansion plan will keep a provision for this.

**C. Other Best Practices**

- **Universal Brotherhood:** In the present context when the entire country is facing and encountering various problems, Universal Brotherhood is the essence of Hansraj College.

As the college is based on the ethos of Swami Vivekananda, Universal Brotherhood is followed in both letter and spirit. Because we are a very big institution and we have students from each and every part of the country, the college campus is a symbol of universal brotherhood.



With support from Vivekananda Ashram, since 2006, College celebrates Universal Brotherhood day. Vasudev Kutumbakam is the theme of every activity carried out. Many workshops have been held in college to spread the message of brotherhood. Students are taught to rise above caste, creed and region and consider brotherhood as the best message. This is very important as the students of today are going to be the leaders of tomorrow.

Major G.D. Bakshi, Mr. Suresh Prabhu, Dr. Eshwaran, Shri Ajit Doval, Prof. Anand Prakash have delivered talks on Universal Brotherhood. The speech of Swami Vivekananda is commemorated with great respect by each and every one in college.

Hansraj College as an educational institute is committed that the fabric of communal harmony is maintained and children from all religions, regions, castes are getting quality and inclusive education. Whenever there is crisis on the national front in terms of natural calamities, droughts, floods etc., the message of universal brotherhood is carried forward. Students gear up together from all the regions to generate support and help each other.

Universal Brotherhood Day is celebrated every year. The beliefs, principles and teachings of Swami Vivekananda are instilled into the students.

Universal brotherhood suggesting that the world belongs to us all and we can share space without encroaching upon each other's idealism is preached here in letter and spirit. As a unit, we stand together on all occasions, stand by the nation at times of need and follow universal brotherhood by offering every possible help when others seek help from us.

- **Performing Yagya:** Maximum possible students as well as teaching & non teaching staff perform Yagya on every first Tuesday of the month. The entire atmosphere echoes with the soothing chants of Vedic Mantras and infuses energy and positivity. A dedicated Yagya Shala has been created for the purpose.
- **Alumni Association:** The College has more than 8000 members in its Alumni Association, with pass outs from as early as 1950s. The events are organized by a democratically elected body, with College Principal as the Patron and a Secretary from the College staff.
- **Film Society:** The Film Society of the college screens films and documentaries that sensitize students about social issues. Scientific Fiction based films, films based on biographies, autobiographical sketches; historical movements, art and tourism are screened on and off to educate students through this media. It is believed that these play an important role in carrying messages.

Documentaries on the lives of various scientists and their discoveries that are made by recognized agencies such as Vigyan Prasar are screened for the students. *The Darwin Puzzle, The Warming Effect, The Rain Catchers, Water and Hugging the Trees* have been screened to help students understand the fundamental aspects of the topics.

- **NSS:** The College has a very strong NSS wing, which is involved in various activities. Project *Padhaku* is the most noteworthy activity of NSS.
- **Women Development Cell:** The Women Development Cell of Hansraj College ensures women's empowerment and organizes talks on various topics.
- A sexual-harassment prevention committee has also been put into place to ensure a safe learning environment for all students.



- The enabling Unit of Hansraj College also does commendable work in empowering the differently-abled.
- Keeping pace with the developing world, the college website is maintained and updated to ensure that information is accessible to everyone at all times.
- The college also recognizes a need for global out-reach, and thus offers part-time certificate, diploma and advanced diploma courses in French and German languages.
- Giving a voice and a platform for expression to the student, Hansraj College has an annual magazine that is published with sections in English, Hindi, as well as Sanskrit.
- The college realizes the need for physical fitness and physical education, and thus has remarkable facilities for sports, including shooting and archery ranges, basketball court, a sports ground, an indoor badminton court and various other facilities which are available to all students.

**D. Contact Details**

Name of the Principal	:	Dr. Rama
Name of the Institution	:	Hansraj College
City	:	Delhi
PIN Code	:	110007
Accredited Status	:	Permanent
Work Phone	:	011-27667747
Mobile	:	91-98911-72389
Fax	:	011-2766338
Website	:	<a href="http://hansrajcollege.co.in">hansrajcollege.co.in</a>
E-Mail	:	<a href="mailto:principal_hrc@yahoo.in">principal_hrc@yahoo.in</a>



## EVALUATIVE REPORT OF THE DEPARTMENT OF BOTANY

1. **Name of the department:** Department of Botany
2. **Year of Establishment:** 1964
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** B.Sc. (Hons.) Botany and M.Sc. Botany
4. **Names of Interdisciplinary courses and the departments/units involved:** B.Sc. Life Sciences, B.Sc. (H) Anthropology, B.Sc. Physical and Applied Physical Sciences, B.Sc. (H) Chemistry
5. **Annual/semester/choice based credit system(programmewise):** Semester system and Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** Department participates in teaching Botany and subjects related to Plant Sciences to other streams and also takes papers of B.Sc. Life Sciences, Physical and Applied Physical Sciences. Department also coordinates the teaching of Environmental Sciences Compulsory course in the college.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**  
N/A
8. **Details of courses/programmes discontinued(if any) with reasons:** B.Sc. General Group B, university stopped this course as B.Sc. Life Sciences Multidisciplinary Course with modified and updated curriculum was adopted.
9. **Number of Teaching posts**

	Sanctioned	Filled
Professors		
Associate Professors	12	3
Assistant Professors		9

10. **Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D./M.Phil.etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
V.S. Sajwan	M.Sc. Ph.D	Associate Professor	Plant Anatomy and Plant Pathology	35	
Manju Mathur	M.Sc. Ph.D	Associate Professor	Plant Pathology and Taxonomy	31	



Vijay Rani Rajpal	M.Sc. M.Phil. Ph.D.	Associate Professor	Genetics and Molecular Biology	19	3
Anand Sonkar	M.Sc. M.Phil. Ph.D.	Assistant Professor	Anigospem Taxonomy	12	
Monika Koul	M.Sc. M.Phil. Ph.D.	Assistant Professor	Ecology and Reproductive Biology	10	
Ishwar Singh	M.Sc. Ph.D	Assistant Professor	Microbiology and Plant Pathology	14	
Tuisem Shimrah	M.Sc. M.Phil. Ph.D.	Assistant Professor	Ecology	6	
Archana Singh	M.Sc. Ph.D	Assistant Professor	Molecular Biology	6	
Mahaswetta Saikia	M.Sc. Ph.D	Assistant Professor	Cell and Molecular Biology	6	
Romila Rawat Bisht	M.Sc. Ph.D	Assistant Professor	Reproductive Biology and Phycology	6	
Satyakam Guha	M.Sc. M.Phil. Ph.D.	Assistant Professor	Plant Tissue Culture	6	
Shalini Kaushik Love	M.Sc. Ph.D	Assistant Professor	Ecology, Environmental Biology	2	
Mohd. Hanief	M.Sc. M.Phil.	Assistant Professor	Environmental Biology	10 months	

11. List of senior visiting faculty: None
12. Percentage of lectures delivered and practical classes handled(programmewise) by temporary faculty: 10-15%
13. Student-Teacher Ratio(programmewise): 20:1
14. Number of academic support staff(technical) and administrative staff; sanctioned and filled: Sanctioned 12, Filled 10
15. Qualifications of teaching faculty with DSc/ D.Litt/Ph.D/ M.Phil/ PG.:
  - Dr. V.S. Sajwan M.Sc., Ph.D
  - Dr. Manju Mathur M.Sc., Ph.D
  - Dr. Vijay Rani Rajpal M.Sc., M.Phil., Ph.D.
  - Dr. Anand Sonkar M.Sc., M.Phil., Ph.D.





- Dr. Monika Koul M.Sc., M.Phil., Ph.D.
- Dr. Ishwar Singh M.Sc., Ph.D.
- Dr. Tuisem Shimrah M.Sc., M.Phil., Ph.D.
- Dr. Archana Singh M.Sc., Ph.D.
- Dr. Mahaswetta Saikia M.Sc., Ph.D.
- Dr. Romila Rawat Bisht M.Sc., Ph.D.
- Dr. Satyakam Guha M.Sc., M.Phil., Ph.D.
- Dr. Shalini Kaushik Love M.Sc., Ph.D.
- Mohd. Hanief M.Sc., M.Phil.

**16. Number of faculty with on going projects from a) National b) International funding agencies and grants received: 5**

Name of the faculty	Funding Agency	National/International	Amount
Dr. Vijay Rani Rajpal	National Medicinal Plant Board	National	24L
Dr. Anand Sonkar	DST-SERB	National	12L
Dr. Monika Koul	UGC, MR.P	National	9.8L
Dr. Tuisem Shimrah	DST-SERB	National	12L
Dr. Archana Singh	DST-SERB	National	18.2L

Eight Teachers of the Department are involved in Innovation Project awarded by University of Delhi. Names of the Faculty members involved are as follows:

- Dr. V.S.Sajwan
- Dr. Vijay Rani Rajpal
- Dr. Anand Sonkar
- Dr. Ishwar Singh
- Dr. Archana Singh
- Dr. Romila Rawat Bisht
- Dr. Satyakam Guha
- Dr. Shalini Kaushik Love



17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc.and total grants received:

Faculty Members	Year	Funding agency Grant received	Title of the Project	Nature of the Project
Dr. Vijay R Rajpal	2014-17	National Medicinal Plant Board Rs. 24.0 lakhs	Autotetraploid induction, Ensuing Heteroploid Hybridization and Associated Rapid DNA changes as a possible Means of Genetic improvement of the Diploid <i>Tinospora cordifolia</i> and <i>Pluchea lanceolata</i> ".	Major Research Project
Dr. Anand Sonkar	2013-15	DST-SERB Rs. 12.0 lakhs	"Taxonomic and Phylogenetic studies on the genus <i>Heracleum</i> L. in India"	Empowerment and Equity Opportunities for Excellence in Science 2013
Dr. Monika Koul	2015 onwards	UGC- MHRD Rs. 9.81 lakhs	Evaluation and analysis of four medicinal plants for their pollution load in wild, cultivated and controlled conditions and response of their bioactive constituents in terms of yield and quality	Major Research Project
Dr. Tuisem Shimrah	2013-15	DST-SERB Rs. 12.0 lakhs	"Land use change and soil organic carbon stock in ecologically strategic upland village agro-ecosystems in north east India: A case study in Shirui National Park"	Empowerment and Equity Opportunities for Excellence in Science 2013
Dr. Archana Singh	2013-16	DST-SERB Rs. 18.25 lakhs	"Cloning and functional characterization of Helicoverpa –inducible Hevein-like-protein from chickpea"	Fasttrack by DST, Govt. of India



Faculty Members	Year-Duration	Funding agency & Grant received	Title of the Project
Dr. Vijay Rani Rajpal Dr. Manju Mathur	2013-15	DU HRC-201 Rs. 6 lakhs	Plant Invasions: Exploring the Ploidy Connection
Dr. Archana Singh	2013-15	DU HRC 203 Rs. 3.5 Lakhs	Comprehension of ethnic practices of selected Indian tribes as pro-ecological customs and their deviation from the stream
Dr. Anand Sonkar	2013-15	DU HRC-210 Rs. 6.0 Lakhs	Development of Zero Discharge, Eco-friendly, Affordable and Carbon Neutral Bio-Fuel using in house Horticultural Waste
Dr. Romila R. Bisht Dr. V.S. Sajwan Dr. Shalini K. Love	2015-16	DU HRC 302 Rs. 3.5 lakhs	“Development of mobile based application for the real time localization and identification of selected flora in University of Delhi”
Dr. Vijay Rani Rajpal	2015-16	DU HRC 303 Rs. 3.5 lakhs	“The extraction and utilization of natural pigments in cosmetics”
Dr. Satyakam Guha	2015-16	DU HRC 305 Rs. 5 lakhs	“Nutritional profiling and its correlation with functional respiratory capacity in soldiers/volunteers”
Dr. Anand Sonkar	2015-16	DU HRC 306 Rs. 5 lakhs	“Utilization of Delhi Garden waste for renewable and sustainable energy production”
Dr. Ishwar Singh Dr. Monika Kaul	2015-16	DU HRC 311 Rs. 4 lakhs	Study of germicidal properties of fumes generated in <i>havan</i> ( <i>Yagya</i> ) in order to assess potentiality of <i>havan</i> in curing some infections and air borne diseases
Dr. Archana Singh	2015-16	DU HRC 313 Rs. 3.5 lakhs	“Critical and scientific analysis on use of alternative medicines with practical approach and case studies”

18. Research Centre /facility recognized by the University: None

19. Publications:

a) Publication per faculty: List attached

b) Number of papers published in peer reviewed journals (national/international) by faculty and students: 65



- c) Number of publications listed in International Database (For Eg:Web of Science, Scopus)
- d) Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)
- Chapter in Books: 19
- Books Edited: 1
- Books with ISBN/ISSN numbers with details of publishers: 1
- Citation Index: NA
- SNIP: NA
- SJR:NA
- Impact factor: NA
- h-index: NA

20. Areas of consultancy and income generated: None

21. Faculty as members in

- Dr. Vijay Rani Rajpal: Member, Institutional Bio-safety committee of DBT  
Member, IRIS, Scientific Review Committee  
Member, New York Academy of Sciences, USA
- Dr. Anand Sonkar : Member, Indian Association for Angiosperm Taxonomy
- Dr. Monika Koul : Member IRIS, Scientific Review Committee  
Vigyan Prasar, DST, Government of India  
Expert ...Science this week....Doordarshan
- Dr. Ishwar Singh : Member of Editorial Board, Journal of Pathology
- Dr. Archana Singh : Member Secretary of Institutional Bio-safety committee of DBT  
  
**Member of Editorial Board of the following journals:**  
Global Journal of Biotechnology and Biochemistry Research  
International Journal of Advanced Biotechnology Research  
International Journal of Molecular Genetics

**Member of International / National Societies:**

American Society for Plant Biology

Life member of Association of Microbiologists of India

Life member of Indian Biophysical Society

**22. Student projects**

- a) Percentage of students who have done in-house projects including interdepartmental/ programme: 70%
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies: 10%

**23. Awards/Recognitions received by faculty and students:**

- Dr. Ishwar Singh, UGC Research Award
- Dr. Anand Sonkar, Awarded with Teaching Excellence Award for Innovation by University of Delhi on May 1<sup>st</sup> 2015. His innovation project entitled “Development of zero discharge eco-friendly, affordable and carbon neutral bio-fuel using in house horticultural waste” was also awarded for its best innovative idea at Antardhwani 2015
- Dr. Monika Koul, Selected for Vice Chancellors Fellowship
- Dr. Archana Singh, Awarded with Best display for Innovation Project, 2013-15

**24. List of eminent academicians and scientists/visitors to the department:**

Name of the Eminent Personality Affiliation	Purpose/Year
Dr. Jeremy Simpson, Professor Department of Cell and Molecular Biology Ireland University, Ireland	Cancer Biology (2013)
Dr. Geetanjali Yadav, NIPGR, JNU, New Delhi	Bio-informatics in plant reproduction (2014)
Prof. J.P. Khurana Department of Plant Molecular Biology, South Campus, University of Delhi, Delhi	Phytochromes: The recent facets of their working in plant systems (2011)
Prof. K.C. Bansal, Director National Bureau of Plant Genetic Resources (NBPGR) New Delhi	Genetically Modified Foods: Debate still going on (2011)
Prof. V. Jaya Ram Indian Institute of Technology, New Delhi	Bioinformatics and its applications (2012)
Prof. A.K. Bhatnagar, Professor Department of Botany, University of Delhi, Delhi	Pollination Biology: recent trends and insights (2012)
Prof. Ashwini Pareek, Professor School of Life Sciences, Jawahar Lal University New Delhi	Molecular Aspects of Abiotic Stress (2015)
Dr. T Venketaswaran	Biology and Modern science: The



Department of Science and Technology, Government of India, New Delhi	relevance today (2013)
Dr. Subodh Sharma, Ministry of Environment and Forest, Govt Of India, New Delhi	Climate Change: Where does India stand today (2011)
Prof. Yogender Singh, IGIM, Mall Road, New Delhi	Drug Discovery: Tuberculosis today (2014)
Prof. Sudeshna Mazumdar, Professor Department of Botany, University of Delhi, Delhi	Plant-Pathogen Interaction: Papaya Mosaic Virus (2013)
Prof. Rupam Kapoor, Professor, Department of Botany, University of Delhi, Delhi	Mycorrhizal Associations and their role in Plants (2014)
Prof. Arun Jaganath, Professor, Department of Botany, University of Delhi, Delhi	Systems Biology: The Modern Perspectives (2013)
Prof. S. Natesh, Department of Biotechnology, Government of India, Delhi	Plants and human civilizations (2012)

## 25. Seminars/Conferences/Workshops organized & the source of funding

- a) National: 2 Department of Environment, NCT, Delhi, 1 University Grants Commission
- b) International: None

## 26. Student profile programme/coursewise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. (Hons.) Botany	Data not available	68	33	35	100
M.Sc. Botany					90-95%

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	% of students from abroad
B.Sc. (Hons.) Botany	11	57	0
M.Sc. Botany	20	80	

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

There are good number of students who have qualified competitive examinations like CDS, GATE, NET, SLET but college doesn't have the exact numbers recorded with it.



### 29. Student progression

Student progression	Against % enrolled (Approximately)
UG to PG	40%
PG to M.Phil.	20%
PG to Ph.D.	20%
Ph.D. to Post-Doctoral	
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	1-2%
Entrepreneurship/Self-employment	10%

### 30. Details of Infrastructural facilities

- Library: Department has a well developed library where recent text books are purchased every year. Students have an access to the Central College Library where journals and magazines are housed.
- Internet facilities for Staff & Students: Department has many computers that have internet facilities for use.
- Classrooms with ICT facility: All the labs are equipped with projectors, computers and internets.
- Laboratories: Department has 4 well equipped teaching labs, besides we have a culture room and an instrumentation room where many equipments have been procured for use of students.

### 31. Number of students receiving financial assistance from college, university, government or other agencies: 15

### 32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

- Department every year conducts seminars for students and invites experts from various fields of plant sciences to deliver lectures on frontier areas of research.
- Workshops have been conducted for the students under the DBT star college scheme.

### 33. Teaching methods adopted to improve student learning:

Faculty of the Department is well trained and everyone has obtained doctoral degree. Besides, faculty keeps abreast with the latest developments. Teachers are using both conventional and non-conventional methods of teaching. Discussions, presentations, on field studies, excursions are all part of the teaching learning process.



**34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

Students as well the teachers of the Department are involved in various activities in the college. Faculty members have been involved in conducting examinations:

- Dr. V.S.Sajwan, Dr. Manju Mathur, Dr. Anand Sonkar and Dr. Romila Rawat had served as Superintendent Theory examination
- Dr. Manju Mathur, Dr. V.S. Sajwan have served as convenor of the Garden Committee
- Dr. Vijay Rani Rajpal has served as Secretary, Staff Council, Convener Admissions, Sciences, Convener of the Garden Committee, Convener Environmental Awareness Society
- Dr. Anand Sonkar has served as PIO of the college and is presently the Coordinator for the DBT Star College Programme
- Dr. Ishwar Singh is presently the Convener of Development Committee.
- Dr. Monika Koul has been the Programme officer NSS

**35. SWOC analysis of the department and Future plans:****Strengths:**

- Department has highly qualified faculty. The teachers are trained in various disciplines of plant sciences. Teachers have received doctoral degrees in the fields of Genetics, Molecular Biology Taxonomy, Reproductive Biology, Tissue Culture, Microbiology, Pathology, Ecology and Environmental Sciences.
- All the teachers have publications in high impact factor journals.
- Cut off intake is very high. We admit students who have secured 90% and above marks in class 12<sup>th</sup>.
- We get students from all parts of the country. We are a diverse department.
- Teachers of the Department are also involved in popularizing science by delivering talks at various platforms.

**Weakness:**

- At present since many students are eager to take admission in the college, we are hard pressed with space.
- We don't have enough rooms in the Hostel to accommodate students from outside Delhi
- Because we do not have a girl's hostel, we at times miss on admitting many bright girls.



### **Opportunities:**

Plant sciences are coming off age. Since we are teaching both modern and classical subjects our students are selected in various places and institutes across the country. Since we teach ecology, environmental science and conservation biology, our department has a potential to play a forerunner in providing human resources to the country.

### **Challenges:**

Challenges to the Department are that we are not able to take many good students and retain them as many para-science disciplines are coming up which students find as an easy option.



## EVALUATIVE REPORT OF THE DEPARTMENT OF CHEMISTRY

1. **Name of the Department:** Department of Chemistry

2. **Year of Establishment:** 1948

3. **Names of Programmes/ Courses offered:**

- Undergraduate: B. Sc. (Hons) Chemistry, B. Sc. (Prog) Physical Sciences and B. Sc. (Prog.) Life Science
- Postgraduate: M. Sc. Chemistry

4. **Names of Interdisciplinary courses and the departments/units involved:**

- B. Sc. (Prog) Physical Sciences, B. Sc. (Prog) Life Science
- Botany, Zoology, Physics, Mathematics, Integrated M.Sc. in Earth Science, Geology.

5. **Annual/semester/choice based credit system (programme wise):**

- I year Chemistry (Hons), Life Science, Physical Science: choice based credit system
- II year Chemistry (Hons), Life Science, Physical Science: Semester System
- III year Chemistry (Hons): erstwhile FYUP system

6. **Participation of the Department in courses offered by the other Departments:**

B. Sc. (Hons) Geology, M. Sc. Earth Science, B. Sc. (Hons) Mathematics, B. Sc. (Hons) Botany, B. Sc. (Hons) Zoology and B. Sc. (Hons) Physics

7. **Courses in collaboration with other universities, industries, foreign institution etc.:**

Nil

8. **Details of courses/ programmes discontinued if any with reasons:**

Anthropology (Reason: Chemistry removed from the curriculum)

9. **Number of Teaching Posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	25	5
Assistant Professors		20



10. Faculty Profile with name, qualifications, designation, specialization, (D. Sc./ D. lit./ Ph. D./M. Phil. Etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D. Students guided for the last 4 years
Dr. Shashi Saxena	Ph. D.	Associate Professor	Inorganic Chemistry	35	-
Dr. Ranjana Rastogi	M. Phil., Ph. D.	Associate Professor	Inorganic Chemistry	31	-
Dr. Bijendra Singh	Ph. D.	Associate Professor	Inorganic Chemistry	32	-
Dr. Shampa Bhattacharyya	Ph. D.	Associate Professor	Physical Chemistry	19	-
Dr. Renu Parashar	M. Phil., Ph. D.	Associate Professor	Physical Chemistry	15	-
Mr. Satish Chand	M. Phil.	Assistant Professor	Organic Chemistry	10	-
Dr. Anjali Saxena	Ph. D.	Assistant Professor	Organic Chemistry	8.5	-
Dr. Chetna Gupta	Ph. D.	Assistant Professor	Inorganic Chemistry	6	-
Dr. Aparna Garg	Ph. D.	Assistant Professor	Physical Chemistry	8	-
Dr. Pratibha Tiwari	Ph. D.	Assistant Professor	Inorganic Chemistry	6.5	-
Dr. Monika Dinodia	Ph. D.	Assistant Professor	Organic Chemistry	6.5	-
Dr. Jyoti Singh	Ph. D.	Assistant Professor	Physical Chemistry	5	-
Dr. Manoj Kumar	Ph. D.	Assistant Professor	Organic Chemistry	5	-
Dr. S. K. Singh	Ph. D.	Assistant Professor	Physical Chemistry	12	-
Dr. Himanshu	Ph. D.	Assistant Professor	Organic Chemistry	6	-
Dr. Shweta Rastogi	M. Phil., Ph. D.	Assistant Professor	Organic Chemistry	8.6	-
Dr. Aparna Bansal	Ph. D.	Assistant Professor	Organic Chemistry	6.9	-
Dr. Parul Pant	Ph. D.	Assistant Professor	Inorganic Chemistry	4	-
Dr. Brijesh Rathi	Ph. D.	Assistant Professor	Organic Chemistry	5	-
Dr. Ambika	Ph. D.	Assistant Professor	Organic Chemistry	7.5	-
Dr. Taruna Singh	Ph. D.	Assistant Professor	Inorganic Chemistry	3.9	-
Dr. Amit K. Rawat	M. Phil., Ph. D.	Assistant Professor	Organic Chemistry	1.5	-
Mr. Harimohan Meena	M. Sc.	Assistant Professor	Inorganic Chemistry	5.5	-
Mr. Surendra Kumar	M. Sc.	Assistant Professor	Organic Chemistry	4	-
Dr. Nidhi Rawat	Ph. D.	Assistant Professor (ad hoc)	Physical Chemistry	2.5	-

**11. List of Senior visiting Faculty: List of esteemed speakers**

- Prof. R. N. Mukherjee
- Prof. A. K. Ganguly
- Prof. P. K. Roy
- Prof. N. R. Jagannathan
- Dr. S. C. Dutta

**12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty: 4%****13. Student teacher ratio (programme-wise)**

- B.Sc.(HONS.) - 29:1
- B.Sc.(PROG.) - 20:1

**14. Number of academics support staff (technical) and administrative staff; sanctioned and filled**

Designation	Sanctioned	Filled
Lab Assistant	16	12
Lab Attendant	14	9 (6 permanent+ 3 temporary)

**15. Qualifications of teaching faculty with D. Sc./ D. Lit./Ph. D./ P.G.**

- 18 Teachers with Ph. D ( Which includes 1 Post Doctoral Fellow )
- 4 Teachers with M. Phil. and Ph. D.
- 1 Teacher with M. Phil.
- 2 Teachers with M. Sc.

**16. Number of faculty with ongoing projects from a) National and b) International funding agencies and grants received:**

Nil

**17. Departmental projects funded by DST, FIST, UGC, DBT, ICSSR etc. and total grant received:**

- UGC funded (minor) project, total grant Rs. 1,64,000.
- Innovation Projects in 2013– 03 Projects (Total grant information is available with the Principal)
- Innovation Projects in 2015 – 05 Projects (Total grant information is available with the Principal)



## 18. Research Centre/ facility recognized by university:

Nil

## 19. Publications

Name	National/International	Name	National/International
Dr. Shashi Saxena	4	Dr. S. K. Singh	5
Dr. Ranjana Rastogi	3	Dr. Himanshu	8
Dr. Bijendra Singh	20	Dr. Shweta Rastogi	24
Dr. Shampa Bhattacharyya	3	Dr. Aparna Bansal	5
Dr. Renu Parashar	9	Dr. Parul Pant	3
Mr. Satish Chand	Nil	Dr. Brijesh Rathi	22
Dr. Anjali Saxena	6	Dr. Ambika	6
Dr. Chetna Gupta	7	Dr. Taruna Singh	4
Dr. Aparna Garg	2	Dr. Amit K. Rawat	3
Dr. Pratibha Tiwari	8	Mr. Harimohan Meena	1
Dr. Monika Dinodia	9	Mr. Surendra Kumar	1
Dr. Jyoti Singh	2	Dr. Nidhi Rawat	4
Dr. Manoj Kumar	4		

## a) Publication per faculty

- Number of papers published in peer reviewed journals (national/ international) by faculty and students: 162 papers by teachers (For the titles, see the individual SSR)
- Number of publications listed in international Database: 162 papers by teachers
- Monographs: Nil
- Chapter in books: 5 chapters by Dr. Ambika.
- Books Edited: Nil
- Books with ISBN/ISSN numbers with details of publishers

## b) Application of Nano materials to Biosensors by Lamberts Publication ISBN-978-3-8383-9845-7 by Dr. Pratibha Tiwari.

## c) Environmental Studies Book. Taxmann Publication ISBN-978-93-5071-736-3 by Dr. Parul Pant.

- Citation Index: Variant quantity, recent data not available
- SNIP: Variant quantity, recent data not available
- SJR: Variant quantity, recent data not available
- Impact Factor: Variant quantity, recent data not available.
- h-index: Variant quantity, recent data not available.

**20. Areas of consultancy and income generated:**

Nil

**21. Faculty as members in****a) National Committees:**

- Life member of Indian Society of Analytical Scientists (ISAS): Dr. Shampa Bhattacharyya, Dr. Renu Parashar, Dr. Anjali Saxena, Mr. Satish Chand, Dr. Chetna Gupta, Dr. Pratibha Tiwari.
- Life member of Indian Association of Cultivation of Science: Dr. Shampa Bhattacharyya.
- Life member of Green chemistry network centre (GCNC): Dr. Chetna Gupta, Dr. Ambika.
- Life member of Material Research Society: Dr. Pratibha Tiwari.
- Life member of Association of Chemistry Teachers: Dr. Renu Parashar, Mr. Satish Chand.
- Life member of Indian Chemical Society: Dr. Parul Pant.
- Life member of Journal Research and Teaching in Chemistry: Dr. Renu Parashar.
- Life member of Indian Science Association: Mr. Satish Chand
- Life member of Chemical Research Society of India (CRSI): Dr. Shweta Rastogi.
- Life member of DNA Society of India: Dr. Aparna Bansal.
- Life member of Indian Biophysical Society: Dr. Aparna Bansal.

**b) International Committees:**

- Life member of Asian Polymeric Association (APA): Dr. Shweta Rastogi.

**c) Editorial Boards:**

Dr. Taruna Singh:

- Journal of Integrated Science and Technology.

Dr. Brijesh Rathi:

- Guest Editor, special issue on “Self-assembled nanostructures in medicinal chemistry: Advances and applications” of Current Topics in Medicinal Chemistry (IF: 3.453).
- Scientific Advisor, Synapse Clinical Research Foundation (SCRF), India





- National coordinator and organizing secretary, 1<sup>st</sup> International conference on emerging trends of nanotechnology in drug discovery (May 26-27, 2014).
- Executive Editor, Innovational Journal of Chemistry;  
<http://ijochem.com/EditorialBoard.aspx>
- Editorial Member, "International Journal of Biomedical Materials Research" Published by Science Publishing Group, New York, USA.  
<http://www.sciencepublishinggroup.com/journal/editorialboard.aspx?journalid=221#top>
- Editorial Member, "Advanced Chemistry Letters" Published by American Scientific Publishers, USA;  
[http://www.aspbs.com/acl/editorial\\_acl.htm](http://www.aspbs.com/acl/editorial_acl.htm)
- Editorial Member, "Journal of Nano Education" Published by American Scientific Publishers, USA;  
[http://www.aspbs.com/jne/editorial\\_jne.htm](http://www.aspbs.com/jne/editorial_jne.htm)
- Editorial Member, "Chemical Biology Letters" Published by Indian Science Publications; <http://pubs.iscience.in/journal/index.php/cbl/pages/view/editorialboard>
- Editorial Member, Austin Journal of Bioorganic & Organic Chemistry;  
<http://www.austinpublishinggroup.com/bioorganic-organic-chemistry/>
- Editorial Member, American Journal of Applied Chemistry" Published by Science Publishing Group, New York, USA.  
<http://www.sciencepublishinggroup.com/journal/editorialboard.aspx?journalid=226>
- Editorial Member, "American Journal of Nanoscience and Nanotechnology" Published by Science Publishing Group, New York, USA.  
<http://www.sciencepublishinggroup.com/journal/editorialboard.aspx?journalid=226>

## 22. Student projects

- Percentage of students who have done in-house projects including inter departmental /programme:  
~ 2% students do small projects during summer vacation under the guidance of teachers.
- Percentage of students placed for projects in organization outside the institution i.e. in research laboratories/ Industry/ other agencies:  
~ 2% but no proof available.

## 23. Awards/ Recognition received by faculty and students

- Mr. Shashank Taxak, B. Sc. (Prog) LS II year, 2010-11, University of Delhi Gold Medallist.
- Dr. Manoj Kumar, Dr. Aparna Garg (Teaching excellent award to project HR-210).



## 24. List of eminent academicians and scientist /visitors to the department

Year	Name of Scientist / Eminent Professor	Topic of Talk
2011-12	Dr. V. K. Verma, Joint Director (EPD), Sri Ram Institute for Industrial Research, New Delhi.	Career Prospects in Chemistry Stream
	Dr. Bhupesh Sharma Scientist, Sri Ram Institute for Industrial Research, New Delhi.	Environment Impact Assessment Challenges in Antarctica
	Dr. Krishan Kumar, Associate Professor, School of Environmental Science, JNU.	Trends in the Formation of Urban Heat Island Over Delhi.
2012-13	Prof. R. N. Mukherjee, Director, IISER, Kolkatta, mohanpur.	Chemistry Interfacing with Industry and Biology
	Prof. A. K. Ganguly, Director, Institute of nanoscience and technology, Mohali, Punjab	Design of Nanostructured Materials for Energy and Environmental Applications
	Prof. P. K. Roy, NBRC, Manesar, Haryana	Systems Biochemistry Based Approach to Selection of drug Combinations in Regenerative Neuromedicine.
2012-13	Dr. J.L. Sharma, Associate Professor, Department of Chemitry, Kirori Mal College	Chemical Hazards
2013-14	Dr. C. Sharma, Scientist NPL	Atmospheric Chemistry; A Perspective.
	Sh. V. N. Sehgal, Ret. Director, IB.s	Chemistry in Forensic Science
	Mr. S. C. Mathur, Chemical examiner Central revenue control laboratory, Pusa IARI	Identification of Narcotic Dr.ugs and Psychotropic Substance by Field Testing Kits.
	Prof. N.R. Jagannathan, Head, Department of NMR. and MRI facility , AIIMS Delhi	Peeping Through the Interior of Human Body by Magnetic Resonance (MRI).
2014-15	Dr. S. C. Dutta Retd. Associate Professor Department of Chemistry Hansraj College	Our Life and Stereochemistry.
	Shri S. K. Singla, Central Forensic Science Laboratory, CBI	Science for Justice: Special Reference to Crime Against Women (2014)
	Dr. V. K. Verma, Joint Director (EPD), Shriram Institute for Industrial Research, New Delhi	Career Prospects in Food Sector: Opportunities for Chemistry Students (2015)

**25. Seminars / Conferences/ Workshops organized and the source of funding****a) National seminars:**

- One day National Seminar on “Chemistry in Sustainable Development” sponsored by UGC in 2006.
- One Day Seminar “Synthesis 2012” was organized in 2012.
- One Day National seminar “Chemistry in Interdisciplinary Applications” was organized in 2013, sponsored by UGC.
- One Day Seminar “Frontiers of Chemistry” was organized in 2014.

**b) Workshops:**

- A DBT sponsored workshop on” Relevance of Experimental Chemistry to Biotechnology”, was organized by Department of Chemistry, Hansraj College University of Delhi, from March 12-13, 2014.
- National Workshop on “Role of Scientific and Technical Terminology in Higher Education”, Organized by Department of Chemistry, Hansraj College University of Delhi, and Commission for Scientific and Technical Terminology, Ministry of Human resource and Development, Govt. of India, from July 23-24th, 2015.
- A DBT sponsored workshop on” Application of Analytical Tools to Biochemistry”, was organized by Department of Chemistry, Hansraj College University of Delhi, from July 15-17, 2015.

**c) Educational Visits:**

- A three day educational trip was organized in 2013 to visit National Dairy Research Institute (NDRI), Karnal, Haryana & The Midhills Rosin and Turpenes, Solan, H.P.
- A one day trip was organized to visit National Brain Research Centre, Gurgaon, Haryana.
- The students visited and worked at Paras Dairy for the extraction of protein from milk.
- The students visited TERI Library at Indian Habitat Centre, TERI Gram, Golf Course, Gurgaon.
- The students visited Kotputli plant at Rajasthan.

**d) International: Nil**



## 26. Students Profile programme/Course wise: 2014-15

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B.Sc. Honours Chemistry	Not available	102	72	30	102	100
B. Sc. (Prog) Physical Sciences	Not available	96	75	21	96	100
B. Sc. (Prog.) Life Science	Not available	54	32	22	54	100

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B.Sc. Honours Chemistry	15	87	0

## 28. How many students have cleared national and state competitive examinations such as NET/SLET/GATE/Civil Services/Defence Services etc.;

Approx. 30-40% students took admission in P.G. and different IITs and recognized Institutes and approx. 10% students in Ph.D. from reputed institutes and few are reported to be in defence and civil services.

## 29. Student progression:

Student progression	Against % enrolled
UG to PG	~ 30-40%
PG to Ph. D.	~10%
Ph. D. to Post-Doctoral	~1%

## 30. Details of Infrastructural facilities

- Library: Well maintained Library approximately 3600 books are available (for UG, PG and even for research).
- Internet facilities for staff and students: Available
- Class rooms with ICT facilities: Available with good infrastructure with LCD projectors in lecture theater
- Laboratories: Well equipped 6 laboratories with Ice flake machine, Orbital shaker, Spectrophotometer, Refrigerator, Polarimeter, Colorimeter, de-ionised water unit, Potentiometers, pH meters and Conductivity Bridge with an efficient lab staff.

**31. Number of students receiving financial assistance from college, university, government or other agencies:**

- Approximately 30 students are getting INSPIRE fellowship 2010-2014.
- Students were availing CBSE scholarship.
- Fee concessions are also the part of assistance provided by the college.

**32. Details on students enrichment programmes (special lecture/ workshops/ seminar) with external experts**

Different lectures were organized:

- Atmospheric Chemistry; A Perspective
- Chemistry in Forensic Science
- Identification of Narcotic Drugs and Psychotropic Substance by Field Testing Kits.
- Chemical Hazards
- Career Prospects in Chemistry Stream
- Environment Impact Assessment Challenges in Antarctica
- Trends in the Formation of Urban Heat Island over Delhi
- Chemistry Interfacing with Industry and Biology
- Design of Nanostructured Materials for Energy and Environmental Applications
- Systems Biochemistry, Based Approach to Selection of Drug Combinations in Regenerative Neuromedicine
- Peeping Through the Interior of Human Body by Magnetic Resonance (MRI)
- Our Life and Stereochemistry
- Science for Justice: Special Reference to Crime Against Women
- Career Prospects in Food Sector: Opportunities for Chemistry Students

**33. Teaching methods adopted to improve student learning:**

The following committees have been constituted for the smooth running of the Department

- a) Apparatus Store Committee
- b) Chemical Store Committee
- c) Library Committee
- d) Lab Staff Committee
- e) Instrumentation Committee
- f) Chemical Society

The teams are reconstituted every year.



- Apart from class-room lecture and slide presentation, interactive module has helped to test development of student's understanding and abilities to follow the class-room lectures more closely and absorb the lectures.
- Periodic industry visits are organized to familiarize the students with practical applications. Part of the teaching and student's appreciation takes place in practical classes in the laboratory when students have to conduct the tests by themselves under the guidance of the teachers.
- Students had been drawn into knowledge sharing platform through their active participation in seminars, symposiums, workshops and summer projects. (Annexure I).

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Under the social responsibility umbrella of the college, students take part in teaching under privileged children.
- Every year the department organizes inter college annual festival "CHEMOTSAV" which includes activities like cultural events, group discussion, panel discussions, quiz and paper presentation in which students of other disciplines also participate. Representatives from the industry are invited to the occasion.
- The annual departmental magazine 'EQUILIBRIUM' is brought out in which students contribute innovative and creative writings. The magazine is widely circulated.
- Students are also involved in innovative projects sponsored by University of Delhi.
- The college has semester examinations every December and June for all its courses. There are 5000 regular students in Hansraj College and our college is a centre for the examinations of non-collegiate students - approximately 1500. It is a daunting task to conduct and manage the examinations of such a huge number of students. Yet the Chemistry department has now been undertaking this task for the last 9 years.

Following is list of the teachers who took the responsibility and conducted the examination efficiently as Theory Examination Superintendents:

Year	Morning	Evening
2006 Dec-2007 Jan	Dr. Shashi Saxena	
2012 Dec	Dr. Shampa Bhattacharyya Dr. Renu Parashar	Dr. Shampa Bhattacharyya Dr. Renu Parashar
2013 June	Dr. Shampa Bhattacharyya Dr. Renu Parashar	Dr. Shampa Bhattacharyya Dr. Renu Parashar
2013 Dec	Dr. Shampa Bhattacharyya Mr. Satish Chand	Dr. Shampa Bhattacharyya Dr. Manoj Kumar
2015 June	-	Mr. Surendra Kumar Dr. S. K. Singh



- Dr. Bijendra Singh, Dr. Ranjana Rastogi and Dr. Shampa Bhattacharyya served as Secretary, Staff Council of Hansraj College in different years.
- Dr. Shampa Bhattacharyya was the convener of Seminar and society.
- Dr. Renu Parashar was the convener of Student Welfare committee.
- Dr. Shashi Saxena and Dr. Bijendra Singh were the conveners for the admission in Foreign Language in different years.
- Dr. Ranjana Rastogi and Dr. Shampa Bhattacharyya were Timetable Incharge for sciences in college in different years.
- Dr. Bijendra Singh and Dr. Ranjana Rastogi were Conveners of science admissions.
- Dr. Ranjana Rastogi is presently the convener of women development committee.
- Dr. Aparna Garg is the convener of Spic Macay and Student Welfare committee.
- Over the years Dr. Bijendra Singh has served as convener of many committees constituted by the staff council. He worked as election officer, student union advisor and as hostel warden for more than 8 years. He was commissioned officer of NCC for 25 years. He served as deputy coordinator of Central Evaluation Centre.
- Various teachers of the department served the committees constituted by the staff council. (Annexure II)
- Various teachers were involved in university paper setting. (Annexure III)

### 35. SWOC analysis of the department and future plans:

#### **Strengths:**

- Hansraj College has the reputation of being one of the top colleges in the University of Delhi and attracts the best of the students who want to pursue their career in Chemistry.
- The department has 25 teachers with Ph.Ds and accredited publications.
- The laboratories are well equipped to meet the needs of the curriculum.
- The department gets sponsorship for innovation projects from the University of Delhi and successfully accomplished the previous years' projects. The department is able to network with eminent scientists, academicians and industry representatives who participate in the University events.
- The department has a well-endowed library considered to be the best in the University.
- The department has produced illustrious alumni who are eminently placed in society.

#### **Weakness:**

- Students-Teacher ratio is high (especially in theory classes) and needs improvement.
- The infrastructure requires improvement.





- The department is looking forward to exchange programmes with foreign Universities.
- The department is drastically short of lab staff required to conduct the practical classes smoothly.

### **Opportunities:**

- The college has enough space for expanding the infrastructure.
- There is scope for the installation of more advanced and sophisticated laboratory equipments in the laboratory.
- More space could be added to the existing area of the laboratories.
- There are facilities for introducing E-book facility and on-line access to classroom lectures and promoting digital access.

### **Challenges:**

The number of students has grown in recent years for which number of teachers and laboratory facilities are inadequate. The department is yet to get support to take advantage of digital learning opportunities and e-governance. Industry connection and networking should further be expanded to promote industry attachment and job opportunities for the students. This will require improving the balance between the time spent in class room and industry learning. This could be possible with expansion of the faculty strength and infrastructure so that more time will be available for industry related activity. Any new system of education introduced at undergraduate level should be given sufficient time to stabilize and proper feedback procedure should be introduced.

### **Future Plans:**

- The recruitment of more number of teachers.
- Expansion of teaching and learning infrastructure and facilities.
- Up-gradation and modernization of laboratories.
- Creating the digital contents of learning, teaching and governance.
- Exchange programme with the leading university of the world.
- Institutional arrangement to officially sponsor teachers with fellowship and passage for attending training programmes for teachers' development in collaboration with leading Universities of the world.
- Teachers should be deputed to teach in leading Universities of the west so that they can bring back rich experience of teaching from advanced Universities of the world.

**Annexure I****List of students who attended the internship in other institutes****2011-12**

- Five Students attended “Science Conclave 4” at IIIT Allahabad.

**2012-13**

- Several students were nominated for internships in other organizations. Proof not available.

**2013-14**

- Sumit Bharadwaj did internship at IIT B organized by Indian Academy of Science.

**2014-15**

- Anshika Goel and Shubhi Sharma were trained at Central Forensic Science Laboratory.
- Riham Ahmed, Sangeeta Sangwan, Ashish Garg and Mohit Yadav worked on the project “Caffeine Determination in Soft Drinks”, D. S. Kothari Center, Miranda House, University of Delhi.
- Parul Kajal, Nikita Jain, Sahil Khanna and Shreesh Kala worked on “Spot Test Analysis for Cations”, D. S. Kothari Center, Miranda House, and University of Delhi.
- Kritika Nagpal worked on “Going Green: To Measure the Conductivity, pH, Dissolved Oxygen in Yamuna Water Using Probes”, D. S. Kothari Center, Miranda House, University of Delhi.
- Nikita Jain worked on “Characterization of Copper Nanoparticles”, D. S. Kothari Center, Miranda House, and University of Delhi.
- Ankita Parmar and Shubhi Sharma were HR interns at Bajaj Hindustan Ltd.
- Shubhi Sharma and Nishu Jain worked as marketing Interns at Helpiez.org.
- Nishu Jain had her internship at Codifier Technologies as a content writer.



## Annexure II

## Teachers of Chemistry Department Involved in Various Staff Council Committees

Committee	2011-12	2012-13	2013-14	2014-15
Hostel	Dr. B. Singh	Dr. B. Singh	Dr. B. Singh	Dr. B. Singh
Student Welfare	Mr. S. Chand	Mr. S. Chand	Dr. A. Garg Dr. M. Kumar	Dr. A. Garg
Canteen	Mr. S. Chand	Mr. S. Chand	Mr. S. Chand Dr. J. Singh	Dr. M. Dinodia
Discipline	Dr. S. Saxena	Dr. R. Rastogi	Dr. B. Singh	Dr. S. Bhattacharyya
Development Fund	Dr. B. Singh	-	Dr. B. Singh	Dr. B. Singh(con) Dr. R. Parashar
Seminar	Dr. S. Bhattacharyya(con) Dr. R. Parashar	Dr. S. Bhattacharyya Dr. R. Parashar	-	Dr. M. Kumar
Spic Macay	Dr. B. Singh	-	-	-
Work load	Dr. S. Saxena	Dr. R. Rastogi	Dr. B. Singh	Dr. S. Bhattacharyya
Admission	Dr. S. Saxena	Dr. R. Rastogi (con)	Dr. B. Singh	Dr. S. Bhattacharyya
Finance	-	Dr. B. Singh	Dr. B. Singh	Dr. B. Singh
Grievance	-	Dr. B. Singh	Dr. B. Singh	-
Library	Dr. S. Saxena	Dr. R. Rastogi	Dr. B. Singh	Dr. S. Bhattacharyya
Sports	Dr. S. Saxena	Dr. R. Rastogi	Dr. B. Singh	Dr. S. Bhattacharyya
Attendance	-	-	Dr. B. Singh	-
S. C. / S. T.	-	-	Mr. S. Chand	-
Environment Awareness	-	-	Mr. S. Chand Dr. A. Garg Dr. M. Kumar	Dr. M. Kumar
Monitoring	-	-	-	Dr. S. Bhattacharyya
Special Enabling Unit (Admission)	-	-	Mr. S. Chand	Mr. S. Chand
Dance Society	-	-	-	Dr. A. Garg Dr. J. Singh
Garden	-	-	-	Dr. A. Saxena
Central Purchase	-	-	-	Dr. S. Bhattacharyya
Staff Council Secretary	-	-	-	Dr. S. Bhattacharyya



## Annexure III

## Teachers Involved in University Paper Setting

Years Work	2011-2012	2012-2013	2013-2014	2014-2015
Paper setting	Dr. Aparna Garg (B. Sc. (H) I Yr Geo) Mr. Surendra Kumar (M. Sc. ES I Yr) Dr. Shashi Saxena (B. Sc. (H) III Yr) Dr. Chetna Gupta (B. Sc. (P) APS ) Dr. Manoj Kumar (B. Sc. (P) LS II Yr)	Dr. Shampa Bhattacharyya (B. Sc.(H) II Yr) Dr. Anjali Saxena (B. Sc. (P)APS) Dr. Aparna Bansal (B. Sc. (H) I Yr old) Mr. Satish Chand (B. Sc. II Yr Subsidiary)	Dr. Renu Parashar (B.Sc.(H)III Yr) Dr. Aparna Bansal (B. Sc. (P) APS) Dr. Amit K. Rawat (B. Sc. (H) I Yr Bot) Mr. Satish Chand (B. Sc (H) III Yr) (B. Sc. (P) III Yr APS) Dr. Brijesh Rathi (B. Sc. (H) Bio. Sci.)	Dr. Shashi Saxena (B. Sc. (H) I Yr) Dr. Ranjana Rastogi (B. Sc. (H) II Yr FYUP) Dr. Ranjana Rastogi (B. Sc. (H) III Yr) Dr. Nidhi Rawat (M. Sc. ES I Yr) Dr. Brijesh Rathi (M. Sc. ES I Yr)
Curriculum Development	-	Dr. Shampa Bhattacharyya	-	-
Student Election convener	Dr. Bijendra Singh	Dr. Bijendra Singh	Dr. Bijendra Singh	Dr. Bijendra Singh



## EVALUATIVE REPORT OF THE DEPARTMENT OF COMMERCE

1. **Name of the department:** Department of Commerce
2. **Year of Establishment:** 1953-54
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
  - B.Com(Honours)
  - M.Com
  - B. A. (Programme) with Commerce
4. **Names of Interdisciplinary courses and the departments/units involved**
  - Under the CBCS system, the students of Commerce have the choice of opting papers from the following departments: English, Economics, Hindi, Sanskrit, Mathematics, History, Botany, Zoology, Anthropology, Electronics, Physics, Chemistry, Computer Science.
  - Even earlier under the Semester System the commerce students had exposure to various papers from the departments of Mathematics, Economics, Philosophy, Hindi etc.
5. **Annual/ semester/choice based credit system (programme wise)**
  - B.Com ( Hons.) Ist year & IIIrd year Choice Based Credit System
  - B.Com (Hons.) IInd Year Semester
  - M.Com Semester
  - B.A (Prog) IInd Year Semester
  - B.A (Prog) Ist Year Choice Based Credit System
6. **Participation of the department in the courses offered by other departments**
  - a) Courses offered
    - Insurance and Risk management
    - Micro Economics
    - Investing in Stock Markets
    - Macro Economics
    - Business Statistics
    - Project Management



- Indian Economy
- Economics of Regulation of Domestic and Foreign Exchange Markets

b) Departments involved

English, Economics, Hindi, Sanskrit, Mathematics, History, Botany, Zoology, Anthropology, Electronics, Physics, Chemistry, Computer Science.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

8. Details of courses/programmes discontinued (if any) with reasons

Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors		
Associate Professors	24	5
Assistant Professors		12

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience in the college
Mr. Rakesh Agarwal	M.com	Associate Professor	Law	41 years
Mr. N.K. Jain	M.com, M.Phil	Associate Professor	Finance	36 years
Mr. Bharat Bhushan	M.Com, M.Phil, ACS	Associate Professor	Law & Accounts	33 years
Dr. Neera Chopra	M.com, Ph.D	Associate Professor	HR	29+ years
Dr. Krishan Sachdeva	M.Com, M.Phil, Ph.D	Associate Professor	Taxation & IB	21
Dr. Manjit Singh Saggi	M.Com, Ph.D	Assistant Professor	Finance	9 years 1 month
Dr. Manisha Verma	M.com, M.Phil, Ph.D	Assistant Professor	Corporate Governance	12 years 9 months
Dr. Sonal Sharma	M.Com, M.Phil, Ph.D	Assistant Professor	Finance	13 years
Ms. Sonal Gupta	M.Com	Assistant Professor	OB & Marketing	11 years



Dr. Meghna Malhotra	M.com, M.Phil, Ph.D	Assistant Professor	Business Economics	11 years 7 months
Ms. Preetinder Kaur	M.Com, MFC	Assistant Professor	Accounting & Finance	11 years
Dr. Sushma Rani	M.Com, M.Phil, Ph.D	Assistant Professor	Finance	10
Dr. Reetika Jain	M.com, M.Phil, Ph.D	Assistant Professor	Marketing	10+ years
Dr. Beauty Das	M.Com, Ph.D	Assistant Professor	HR	8 years 2 months
Ms. Sneha Suri	M.com, M.Phil	Assistant Professor	Finance	8 years
Ms. Sudesh Kumari	M.com, M.Phil	Assistant Professor	OB	6 years
Ms. Ruchi	M.B.A	Assistant Professor	Finance	7 years
Ms. Anjali Tuli	M.Com, M.Phil	Assistant Professor (ad hoc)	Finance	5 years 11 months
Ms. Deepshikha Yadav	M.Com	Assistant Professor (ad hoc)	Law & Finance	2 year 9 months
Ms. Ritika Seth	M.Com, M.Phil	Assistant Professor (ad hoc)	Finance	5 years
Ms. Garima Jindal	M.Com	Assistant Professor (ad hoc)	Marketing & HR	1 year 4 months
Ms. Shasta Gupta	M.Com	Assistant Professor (ad hoc)	Corporate Governance	1 year
Ms. Sonam Dutta	M.Com	Assistant Professor (ad hoc)	Marketing	2 months
Mr. Manas	M.com	Assistant Professor (ad hoc)	Finance	1 year 1 month
Mr. Pardeep	M.Com	Assistant Professor (ad hoc)	Finance	5 Months





**11. List of senior visiting faculty**

- Dr. N K Agarwal
- Dr. S K Jain
- Dr. Manoj Sharma
- Dr. K L Dhaiya

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.**

24%

**13. Student -Teacher Ratio (programme wise)**

30:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Nil

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.**

- PG – 24
- M.Phil – 12
- Ph.D – 9



During the last four year, six faculties of the Department of Commerce acquired Ph. D. degree, while one has also submitted her thesis.

S.NO	Faculty name	Specialization	Year	University
1	Dr. Neera Chopra	Human Resource management	2011	Jamia Millia Islamia
2	Dr. Manisha Verma	Corporate Governance	2011	Department of Commerce, DSE, DU
3	Dr. Sonal Sharma	Finance	2013	Department of Commerce, DSE, DU
4	Dr. Meghna Malhotra	Buisness Economics	2014	Department of Business Economics, South Campus,DU
5	Dr. Reetika Jain	Marketing	2015	Department of Commerce, DSE, DU
6	Dr. Beauty Das	Human Resource Management	2015	Jamia Millia Islamia
7	Ms. Sneha Suri	Finance	2015 (Submitted her thesis)	Department of Commerce, DSE, DU

#### 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

##### Teachers

##### List of ongoing Projects

Faculty Members	Year	Funding agency Grant received	Title of the Project	Nature of the Project
Dr. Manjit Saggi	2013-16	UGC Rs. 7.0 lakhs	XBRL-based Corporate Disclosure Practices in India- Opportunities and Challenges	Major Research Project



## List of Innovation Projects:

Faculty Members	Year-Duration	Funding agency & Grant received	Title of the Project	Departments Involved
Dr. Sushma Rani Ms. Preetinder Kaur Ms. Simran Sethi	2014-15	DU HRC-204	Public private puzzle in education: Where the parents want to send their children and why?	Commerce & Economics
Ms. Sonal Gupta, Dr. Krishan Sachdeva Mr. Rama Shankar Kusvaha	2014-15	DU HRC-208	MITHAS-To create awareness among farmers regarding the opportunities in the Beekeeping Industry	Commerce & Hindi

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Nil

## 18. Research Centre /facility recognized by the University

Department of Commerce attempts to inculcate a research bent in its students. There is a specific paper taught by the department faculties with the nomenclature **Project Work**. The students have to undertake a research project under the mentorship of the faculty. It covers wide range of research areas viz., celebrity endorsement, consumerism, jan lokpal bill, mutual funds, security analysis, micro-finance, insurance business and so on.

## 19. Publications:

S.No	Item	Total
1	Number of Paper published in peer reviewed journals (national/ international)	50
2	Number of papers published in conferences	61
3	Monographs	NIL
4	Chapters in Books	2 Chapters
5	Edited books	NIL
6	Books with ISBN/ISSN numbers with details of publishers	8 Books
7	Articles in Magazines	NIL
8	Editorials	NIL
9	E modules	8
10	Citation Index	NIL
11	SNIP	NIL
12	SJR	NIL
13	Impact Factor-range/average	NIL
14	h-index	NIL



Faculty Name	Prof. degree	Research Paper	Paper presentation	Res. project	Conf. part., Wrkshp, course etc.	Books
Mr. Rakesh Agarwal						
Mr. N.K. Jain (See Annexure)		1				1 book
Mr. Bharat Bhushan	√					1 book
Dr. Neera Chopra					1	
Dr. Krishan Sachdev				1 Innovation Project	1	
Dr. Manjit Singh Saggi			2 Int.	1 major RP		1 book
Dr. Manisha Verma		1 Int	1 Int. 14 Nat.		24	1 book 2 e-modules
Dr. Sonal Sharma					2	
Mrs. Sonal Gupta		1 Nat		1 Innovation project	10	
Dr. Meghna Malhotra		1Nat	2 Nat.		14	1 chapter
Mrs. Preetinder Kaur		1 Nat	7 Nat	1 Innovation project	6	
Dr. Sushma Rani		2 Int 3 Nat	3 Nat. 1 Int.	1 Innovation project		1 chapter
Dr. Reetika Jain		1 Int 1 Nat	4 Nat.		6	
Dr. Beauty Das		7 Nat	8 Nat			3 books
Ms. Sneha Suri		1 Nat			1	
Mrs. Sudesh Kumari		2 Nat	2 Nat. 2 Int.		22	
Mrs. Ruchi			3 Nat.		8	
Ms. Anjali Tuli		2 Nat			5	
Ms. Deepshikha Yadav		3 Int	1 Nat (co)		4	
Ms. Ritika Seth		6 Nat	11		21	1 book 6 PG e-module
Ms. Garima Jindal		5 Nat			3	
Ms. Shasta Gupta		6 Int			2	
Ms. Sonam Datta						
Mr. Manas						
Mr. Pardeep		6 Int				
TOTAL	1	50	61	5	130	8 books 2 chapters 8 e- modules



20. Areas of consultancy and income generated

Nil

21. Faculty as members in

- a) National committees
- b) International Committees
- c) Editorial Boards.

Nil

22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

100% Since Research is a compulsory paper for the B.Com (H.) syllabus

Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

20% approx (Data is not available for same)

23. Awards / Recognitions received by faculty and students

a) Awards by Faculty-

Dr. Krishan Sachdeva was recognized as a “Distinguished Teacher” by University of Delhi and felicitated by Dr. A P J Abdul Kalam

Mrs. Sonal Gupta won “Leadership Award” as *Enactus* Faculty Advisor towards professional and personal development of *Enactus* Students in “Indian National Competition 2014” Organised by *Enactus* India in 2014.

Dr. Meghna Malhotra received Best Paper Award in National Conference On “Indian Capital Market: Emerging Issues” organized by IBS Business School, Gurgaon in 2015

b) Awards by Students

**University positions:**

- In year 2010-11 a student of B.Com(hons.) - 3rd year was awarded gold medal in academics by University of Delhi
- In year 2011-12 two students of B.Com (hons.) -3rd year was awarded gold and silver medal in academics by University of Delhi.
- In year 2013-14 one student of B.Com (hons.) was awarded gold medal in academics by University of Delhi.

**Inter-College Events (Year 2014-15):**



- Vansh Bahal and Arpit Goel (Ist Year) were awarded Best Freshers' Team, Case Club League'14 organized by St. Stephens' College in August 2014.
- Harshit Thukral (I<sup>st</sup> Year) was awarded 1st Position at Horse Trade 2014, Sri Venkateshwara College.
- Abhijay Goel, Shubham Jain and Rohan Kumar (Ist Year) were awarded IInd Position at Horse Trade 2014, Sri Venkateshwara College
- Madhav Bansal, Kartik Gupta were awarded 3<sup>rd</sup> position at St Stephens FIC financial knights.
- Aanchal Modi & Shaurya Kapoor were awarded 3rd position at Case study competition organised by E-Clat (economics society of Daulat Ram college) in Feb 2015.
- Chirag Mahawar & Gautam Tharad won 2nd position at Clairvoyance Src.
- Chirag Mahawar was awarded 3rd position at Take Stock.
- Chirag Mahawar & Himanshu Nagpal was awarded 3rd position at Et tu Brute , SSCBS.
- Chirag Mahawar was awarded 3rd position at Paisa Vasool, DCAC.
- Chirag Mahawar & Kunal Bhardwaj was awarded 3rd position at Corporate Suite , SSCBS
- Shivesh Chagti won various Solo western vocal competition: Gargi College - 1 position, Hindu College -2 position, Aaims - 2 position, Miranda House - 1 position, KMC - 2 position, LSR - 3 position, JDMC- 1 position, SSCBS - 2 position.
- Vishal Jogani was awarded 1st position at Riches angel, CVS.
- Vishal Jogani and Prashalya Agarwal were awarded 1st position at Mock stock, JMC.
- Vishal Jogani, Prashalya Agarwal were awarded 2nd position at Bulls n Bears, SSCBS.
- Vishal Jogani was awarded 2nd position at Case Study, DR.C.
- Vishal Jogani, Prashalya Agarwal were awarded 1st position at Mock stock, Bharati Vidyapeeth College of Engineering in Nov 2014.
- The Wolf of Thug Street: Inter college Mock Stock organized by FIC, Hansraj college.
- Vineet Gupta and Aman Jain 3rd position.

#### 24. List of eminent academicians and scientists / visitors to the department



Mr. Sanjiv Dass, corporate trainer, BSE Institute Ltd. for a seminar on “An overview of Indian Stock Indices” in 2011-12

Mr. Amit Jugia, Partner CJS Nanda Associates (also worked with PwC till 2011) conducted a workshop organized by CIMA (London) for the teachers on “Case Study Method of Learning” in 11-12.

Mr. Gautam Ray (Consultant to the Department of Revenue for the policy framework of GST in India) conducted a seminar on “Goods and Service Tax” on 21<sup>st</sup> January 2013

Mr. J.K Batra (Advisor Taxation Federation of Indian Chamber of Commerce and Industry) along with Mr. Gautam Ray conducted the seminar on “Goods and Service Tax” on 21<sup>st</sup> January 2015

## 25. Seminars/ Conferences/Workshops organized & the source of funding

a) National - Nil

b) International - Nil

## 26. Student profile programme/course wise:

This data is for 2014-15.

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B.Com(Honours)	Not Available	261	150	111	261	88.8

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B.com(Hons.)	133	119	9

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

Approximately 35%

## 29. Student progression

Student progression	Against % enrolled
UG to PG	Approx. 65%
PG to M.Phil.	Approx. 15%
PG to Ph.D.	Approx. 3%
Ph.D. to Post-Doctoral	
Employed	
• Campus selection	Approx. 20%
	Approx. 10%





• Other than campus recruitment	
Entrepreneurship/Self-employment	Approx. 2%

### 30. Details of Infrastructural facilities

#### a) Library

Budget of Library – Rs. 163000 for Commerce students

Year	No. of books Purchased	Amount spent on purchase of books
2011-12	366	1,20,107
2012-13	339	1,13,796
2013-14	299	91,383
2014-15	425	1,31,233

#### b) Internet facilities for Staff & Students

Wi-Fi enabled campus having a range of 200mts

Password provided to students to access the Wi-Fi-33 Facility

Laptops provision

#### c) Class rooms with ICT facility

Projector enabled classrooms

Class capacity of 120 Students

#### d) Laboratories

2 Labs designed for Commerce Students

Availability of Laptops to Faculty

Lab capacity of 30 students

Labs are also used for practical papers

### 31. Number of students receiving financial assistance from college, university, government or other agencies

43 students (see annual report)

### 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

The department of commerce with help of commerce society organized the following seminars, workshops, etc., in the past four years:

#### a) Year 2011-12



Seminar on “An overview of Indian stock indices” by Mr. Sanjeev Dass, Corporate Trainer, BSE Institute Ltd.

Workshop conducted by CIMA (London) was organized for the teachers on “Case study method of teaching.”

Seminar on “Social Entrepreneurship” by Prof. K. V Bhanumurthy, Dean, Faculty of Commerce and Head, Department of Commerce.

Organized Business Quiz, Case Study Competition, Mock Stock and Business Games for the students

**b) Year 2012-13**

Organizing monthly event, first being, “Corporate Suave” on 25<sup>th</sup> September 2012, secondly “Mock Stock” on 19<sup>th</sup> October 2012 and the “Smart PREP Session” on 5<sup>th</sup> November 2013 to help students overcome their fear of examination.

Seminar on “FDI in Retail” on 29<sup>th</sup> October 2012 by Mr.s. Archana Kapoor (Former CMD Tourism, Finance Corporation of India Ltd.)

Seminar on “Goods and Service Tax” on 21<sup>st</sup> January 2013 by Mr. Gautam Ray (Consultant to the Department of Revenue for the policy framework of GST in India) and Mr. JK Batra (Advisor Taxation Federation of Indian Chamber of Commerce and Industry)

Seminar on “Companies Bill 2012” by Professor J.P.Sharma (Head of Department of Commerce, Delhi School of Economics, University of Delhi)

**c) Year 2013-14**

Organized an event “The Biz Quiz Savant: A Business Quiz Like No Other”

Organized Seminar on “Leadership” by Prof. Jean Saldanha, Faculty IBS Gurgaon.

Organized Seminar on “Business Ethics, Corporate Responsibility and Organizational Transformation” by Prof. K.V. Bhanumurthy, Faculty, Department of Commerce, Delhi School Of Economics, University of Delhi.

Organized an informative Group Discussion and Question Answer Session in “Rupee in Crisis” on 28<sup>th</sup> October 2013.

Organized an online competition “Stock MIND” from 13<sup>th</sup> Jan 2014 to 23<sup>rd</sup> Jan 2014.

Organized a Seminar on “Stock MIND” on 5<sup>th</sup> March 2014.

Organized a Seminar on “Corporate Governance and Social Responsibility of Business” on 21<sup>st</sup> Feb 2014. Speaker was Prof. J.P. Sharma, Head, Department of Commerce, Delhi School of Economics, University of Delhi.

Online inter-college competition named “The Wolf of Dalal Street” was organized from 15<sup>th</sup> March 2014 to 30<sup>th</sup> March 2014.

**d) Year 2014-15**



Seminar on “Investment Banking” was organized on 26th September 2014.

A “mock-stock” competition was organized for first year students on 3<sup>rd</sup> September 2014.

A Case-study competition “Solveritis’14” was conducted with the one-hour learning session which was organized before the event on 15<sup>th</sup> October 2014

A talk “Empresario” was conducted with the mentorship of EDC IITD on 5<sup>th</sup> November 2014 to create an eco-sphere of entrepreneurship.

A seminar and online Mockstock competition “Stockmind” was organized in collaboration with ICICI Direct in January 2015.

A Seminar on “Group Discussions and Personal Interview” was organised in association with IMS in January 2015.

A seminar was organised on 19 feb 2015 on topic of "Recasting India" by

Mr. Hindol Sengupta- Editor at large at Fortune magazine as the Chief Guest and keynote speaker followed by various academic event in area of finance, marketing, entrepreneurship.

### 33. Teaching methods adopted to improve student learning

Case study method

Self evaluation exercises

Group discussion

Power point presentation

Lecture method

Social Media Networks

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

#### a) Enactus Hansraj

The Department of Commerce in collaboration with *Enactus* Hansraj organized an “Internship Fair” under the “Entrepreneur Summit 2014”. The Entrepreneur Summit enriched the students in the growing concept of Entrepreneurship & offered a dynamic platform for healthy exchange of Ideas between veterans in the field & the young students. The internship fair that the summit organized provided many internships to students from across 40 companies.

#### b) Commerce society

Collaboration with other institutions

The Commerce Society under The Department of Commerce signed a Memorandum of



Understanding (MOU) with Entrepreneurship Development Cell (EDC), IITD for a possible association with the same. The sort of association EDC, IITD has envisioned is unpretentious and is based on mutual trust and agreement. The MOU has been drafted so as to have certain ground rules to which both parties must abide by.

c) Finance and Investment cell

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

Commerce is the mainstay of modern age. Industry, trade and every other economic activity has to have inputs from the field of Commerce. At Hans Raj, Department of Commerce understands this reality and accordingly helps the students to graduate so that they could actively shoulder economic, social and national responsibilities. At the time of admissions into the course, criteria are decided carefully. Once the students join, they are worked on by the dedicated team of faculty members to be turned into economically competent entities. Experiences of the teachers, their exposure to the industry, professional and academic bodies provide the students a chance to unravel the real practicalities of this all pervasive and growing subject. Students are taught a variety of subjects and are made to delve into how to effectively and constructively relate those subjects to the real environment surrounding them. Our Institute has one of the best libraries of the University and effective ICT framework. Therefore, graduation under the tutelage of Hans Raj College makes them capable of managing and leading the activities of the outside world.

#### **Weaknesses:**

Talking about the weaknesses, being a Government College, it faces an unfortunate crunch of funds forcing it to face the issue of not having enough projector rooms. Also, since approximately 25% of faculty members are temporary/ad-hoc, it leads to disruptive impact on the functioning of the department.

#### **Opportunities:**

With the increasing collaboration of the college with the industry and professional bodies, the college will be enriched with the visiting faculty and other resources flowing in from such co-operation. Also Choice Based Credit System (CBCS) would equip the students with highly versatile skills. CBCS has introduced some inter-disciplinary papers like English, Literature and Philosophy which will help them in enhancing their logical and communication skills. Moreover, foreign universities are offering M.Sc. courses to the young faculty members and we take pride in sharing that two of our teachers: Dr. Sneha Suri and Dr. Beauty Das are being currently nourished with the best resources and skills under these courses.

#### **Challenges:**

College provides limited hostel space and that too only for boys. Challenge arises in retaining meritorious girl students on the basis of the factor of accommodation. Also, as the brightest of the bright minds come to the Department of Commerce, due to lack of



infrastructure we might not be able to match up to what they deserve in this era of modernisation.

### **Future Plans:**

Conducting State and National Level Seminar sponsored by UGC.

Conducting more Guest Lectures/Seminars/Workshops by inviting expertise from the market.

Giving students more experience of conducting research.

Through interaction, overcome the weakness of lack of industry interaction and experience.

To cater to students aspirations for professional courses by adapting our pedagogy through leveraging our research experience and our teaching and travel abroad.

### **Annexure**

It is very difficult to catch the real picture of the department solely through the report prepared above which focuses on a specific period of 2011-15. Here are a few excerpts which depict the real strength of the department.

There are 5 more books to the credit of Shri N K Jain which were written prior to 2011. Besides that he has written several research papers which have been published in leading newspapers like Economic Times and magazines like Economic and Political Weekly during the period of 1993-2010.( For more details, Refer to Personal Profile of Shri N K Jain).



## EVALUATIVE REPORT OF THE DEPARTMENT OF COMPUTER SCIENCE

1. **Name of the department:** Department of Computer Science
2. **Year of Establishment:** 1987
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

B. Sc. (Honors) Computer Science

B. Tech Computer Science

Bachelor of Information Sciences

4. **Names of Interdisciplinary courses and the departments/units involved**

Name of Course	Departments involved
<b>B. Sc. Physical Sciences</b>	Mathematics, Physics, Computer Science
<b>B. A. (Program)</b>	Computer Science, History, Economics, Philosophy

5. **Annual/ semester/choice based credit system (programme wise)**

S. No.	Name of the course	System (Annual/Semester/CBCS)
1.	B. Sc.(H) Computer Science 1 <sup>st</sup> year	CBCS
2.	B. Sc.(H) Computer Science 2 <sup>nd</sup> year	Semester
3.	B. Tech. Computer Science 3 <sup>rd</sup> year	Semester (Erstwhile FYUP)

Participation of the department in the courses offered by other departments  
In current session:

S. No.	Name of Paper	Course and Department
1.	Programming Fundamentals	B.Sc. (H) Electronics Sem III, Department of Electronics

Courses in Past four years

S. No.	Name of Paper	Course and Department
1.	Computer Fundamentals	B.Sc. (H) Botany Sem I, Department of Botany B.Sc. (H) Zoology Sem I, Department of Zoology B.Sc. (H) Electronics Sem II, Department of Electronics B.Sc. (H) Anthropology Sem I B.Sc. (H) Geology Sem I B. Sc. Life Sciences
2.	Programming Fundamentals	B.Sc. (H) Electronics Sem III, Department of Electronics
3.	Data Structures	B.Sc. (H) Electronics Sem IV, Department of Electronics



## 6. Participation of the department in the courses offered by other departments

N/A

## 7. Courses in collaboration with other universities, industries, foreign institutions, etc.

N/A

## 8. Details of courses/programmes discontinued (if any) with reasons

B. Tech Computer Science

Bachelor of Information Sciences

University of Delhi started a three year B.Sc. (H) Computer Science degree course in 1997 which was turned into a four year Bachelor of Information Sciences course in the year 1999. In the year 2001, it was reverted back to three year B.Sc.(H) Computer Science.

In the year 2013, University of Delhi introduced FYUP and B.Sc.(H) Computer Science was again converted to four year B. Tech. Computer Science. This also reverted back to B. Sc. (H) Computer Science in the year 2014.

## 9. Number of Teaching posts

	No of Teachers	Filled	Nature of Post
<b>Professor</b>			
<b>Associate Professor</b>	10	2	Permanent
<b>Assistant Professor</b>		8	2 permanent +6 ad hoc

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No of years of Experience	No. of Ph.D. Students guided for the last 4 years
Mr. Sanjay Batra	M.C.A.	Associate Professor	Databases	29	Nil
Dr. Harmeet Kaur	M.C.A., Ph.D	Associate Professor	Recommender Systems	18	3
Dr. Baljeet Kaur	M.C.A., Ph.D	Assistant Professor	Machine learning; Pattern Recognition	12	Nil
Dr. Manoj Agarwal	M.C.A., Ph.D	Assistant Professor	Machine learning	13	Nil
Ms. Sunita Chand	M.C.A., M. Phil., M. Tech.	Assistant Professor	Natural Language Processing, Operating System, Database, Data-Structure, Information Security	11.5	Nil
Ms. Aditi Mittal	M.Sc.	Assistant Professor	Data Mining	2	Nil





Ms. Alka Khurana	M.C.A.	Assistant Professor	Text Mining	2 years 8 months	Nil
Dr. Manju	M. Tech., Ph.D	Assistant Professor	Data Mining, Pattern Recognition	7	Nil
Ms. Aarti Goel	M.C.A., M.Phil.	Assistant Professor	Programming	13	Nil
Ms. Bharti	M.C.A., M. Tech., Ph.D (thesis submitted)	Assistant Professor	Pattern Recognition and image Processing	10 months (as SRF)	Nil

#### 11. List of senior visiting faculty

N/A

#### 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

60%

#### 13. Student -Teacher Ratio (programme wise)

22:1

#### 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

4

#### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.

PG— 10

M. Phil— 2

M.Tech— 3

Ph.D— 4

Name	Qualification
Mr. Sanjay Batra	M.C.A.
Dr. Harmeet Kaur	M.C.A., Ph.D
Dr. Baljeet Kaur	M.C.A., Ph.D
Dr. Manoj Agarwal	M.C.A., Ph.D
Ms. Sunita Chand	M.C.A., M. Phil., M. Tech.
Ms. Aditi Mittal	M.Sc.
Ms. Alka Khurana	M.C.A.
Dr. Manju	M. Tech., Ph.D
Ms. Aarti Goel	M.C.A., M.Phil.
Ms. Bharti	M.C.A., M. Tech., Ph.D (thesis submitted)

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

Ongoing Projects:

National: 2

International funding: Nil

Completed Projects: Nil

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

One University of Delhi sponsored Innovation Project has been selected for the year 2015-16 and a grant of Rs. 7.5lakhs sanctioned for the same.

**18. Research Centre /facility recognized by the University**

Nil

**19. Publications:**

Total (Till date)

S.No.	Item	Total
1	Number of papers published in International Journals	24
2	No. of papers published in National Journals	11
3	Papers presented in Conferences	19
4	Books (Edited/Reviewed/Chapters)	7
5	Invited Talks	4

Total during 2011-2015

S.No.	Item	Total
1	Number of papers published in International Journals	17
2	No. of papers published in National Journals	8
3	Conferences/Workshops/Seminars attended	25
4	Books (Edited/Reviewed/Chapters)	4
5	Invited Talks	2
6	Number of papers published in conferences	17

**20. Areas of consultancy and income generated**

N/A

**21. Faculty as members in**

- a) National committees: Nil
- b) International Committees: Nil
- c) Editorial Boards: Nil

**22. Student projects**

Percentage of students who have done in-house projects including inter departmental/programme

1% (in various innovation projects sponsored by University of Delhi)

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Data not available

**23. Awards / Recognitions received by faculty and students**

a) Faculty: Nil

b) Students:

Session	University Positions	Gold Medals	Sports	Extra Curricular Activities
2014-15	1	-	2	4
2013-14	7	1	2	1
2012-13	6	1	1	1
2011-12	6	1	2	2

**24. List of eminent academicians and scientists / visitors to the department**

Nil

**25. Seminars/ Conferences/Workshops organized & the source of funding**

Talk on “Future of Web Science in India from a Student's Perspective” by Dr. Aastha Madaan, Post-doctoral Research Fellow at the Web Sciences Lab, IIIT - Bangalore and an alumni of the department

Talk on “Career Counseling” by Dr. Ritukar Chaddha, Founder and CEO of a new IT company “MeriPadhai.com” and UKS technologies

Self teaching workshops are held in the department where the students teach each other about the latest technologies. One such workshop of four days was held on “Web Development” was held recently

Department teachers also conduct workshops to familiarize the students with the softwares like MATLAB etc. available for research.



## 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B. Sc. (Honors) Computer	Not Available	57	41	16	57	83.72093

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B. Sc. (Honors) Computer Science	19	37	1

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

A student becomes eligible for such exams after doing post-graduation. Many of our students have cleared such exams but there is no formal mechanism in place yet to collect such information.

## 29. Student progression

Student Progression	% against enrolled
UG to PG	95%
Employment	5%

## 30. Details of Infrastructural facilities

## a) Library

Session	No. of Books Purchased	Amount Spent to Purchase Books (in Rupees)
2011-12	170	62,857/-
2012-13	138	50,959/-
2013-14	101	45,473/-
2014-15	82	47,940/-

## b) Facilities like Internet/Wi-Fi, Computer Labs, ICT, Laptops are available for students.

For details of these facilities, please refer to Criterion IV.

## 31. Number of students receiving financial assistance from college, university, government or other agencies

Please refer to Criterion V.



Session	No. of students who received Scholarships
2014-15	13
2013-14	6
2012-13	3
2011-12	4

### 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Talk on “*Future of Web Science in India from a Student's Perspective*” by Dr. Aastha Madaan, Post-doctoral Research Fellow at the Web Sciences Lab, IIT-Bangalore and an alumni of the department

Talk on “*Career Counseling*” by Dr. Ritukar Chaddha, Founder and CEO of “MeriPadhai.com” and UKS technologies

### 33. Teaching methods adopted to improve student learning

Students are encouraged to participate as resource persons in the self teaching workshops conducted by the department to help them in improving their soft skills.

Events are organized by the department with students assigned the responsibilities of all the duties from the start to the finish of the event, under the supervision of the teachers.

The students prepare presentations on assigned topics which enables them to improve the understanding of topics.

A department website <http://csh.net76.net/> allows for 24x7 type of interaction among the faculty members and the students. Information about the events organized or are scheduled, is regularly updated.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The students and teachers take part in ISR and extension activities as active members of the following college level committees:

*Haritima*: The Environment awareness society

NCC/NSS

*Enactus* (Entrepreneurship and Social Causes)

SPIC MACAY (Promoting Indian Arts and Culture)

For the year 2015-16, Dr. Baljeet Kaur is the Convener for NSS and Incharge of the Entrepreneur Cell.

Refer to criteria 6 and 7 for the details.



### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

The department has young and enthusiastic faculty with industry background. The faculty members are actively involved in research in collaboration with other universities/departments. Ever since its inception, the department has been actively participating in course curriculum design, policy making etc. at the university and the college level. Being a technical course, students get ample opportunities to travel to various universities for competitions etc. and have won accolades for the college.

#### **Weaknesses:**

Presently, the number of adhoc appointments in the department is more than the permanent faculty members. Due to the administrative issues at the University level regarding B. Sc. (H) Computer Science, more permanent appointments were not possible. With a clarification from the University in the recent past, efforts are underway to have more permanent members in the department.

There is a need to upgrade the computer systems of the department to enable the students and faculty to undertake more challenging programming and research assignments.

#### **Opportunities:**

The field of Computer Science is the future and it is a constant endeavour of the department to encourage the students to explore both theoretical and technical aspects of Computer Science. This will prepare the students to undertake research projects or join industry with ease.

The Department of Computer Science is the youngest department in the college but still some of our alumni have attained great heights in such a short time. The department is planning to tap the network of alumni to assist the current students get a clearer picture of the opportunities that await them in future.

#### **Challenges:**

The foremost challenge faced by the department is the diversity of the students in terms of their knowledge of computer science. Especially for the teachers teaching programming courses to the first year students, they have to ensure that the students who do not have computer science background attain similar capabilities as someone who has done it earlier. To achieve this goal not only extra classes but psychological counselling is also done.

It is also felt that more projects should be initiated in collaboration with the industry to keep up with the latest technologies.

#### **Future Plans:**

To have a research lab with latest hardware and software this will help the students with a flair for research to direct their potential at an earlier stage rather than to undertake it after post-graduation. This way the expertise of the teachers will also be truly utilized and it will be a win-win situation for students and teachers alike.



Some departments of the college in association with their University departments conduct some PG classes in the college. Our department also plans to request Department of Computer Science, University of Delhi to have similar arrangement for PG courses offered by them.





## EVALUATIVE REPORT OF THE DEPARTMENT OF ECONOMICS

1. Name of the department: Department of Economics
2. Year of Establishment: 1948
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG-BA (Honours) Economics

BA (Programme) Economics

4. Names of Interdisciplinary courses and the departments/units involved

Interdisciplinary courses offered by Department of Economics:

- a) BA(Programme) Economics

Principles of Microeconomics-I

Principles of Microeconomics-II

Principles of Macroeconomics –I

Principles of Macroeconomics-II

- b) B.Com (Honors)

Generic Elective I – Introductory Microeconomics

Generic Elective II- Introductory Macroeconomics

Macroeconomics

Indian Economy-Performance and Policies

The department offers Generic Elective I & II course on Introductory Economics to the department of Mathematics, English, Sanskrit, History, Physics, Anthropology, Computer Science, Electronics, Hindi, Chemistry, Commerce.

In the fourth semester, we offer Principles of Economics (Concurrent Course) to the department of Mathematics, Hindi, History, Sanskrit, and English.

5. Annual/ semester/choice based credit system (programme wise)

We have three different programmes running in all the three years:

First year: Choice Based Credit System (CBCS)



Second year: Semester system

Third year: Four Year Undergraduate Programme (FYUP)

**6. Participation of the department in the courses offered by other departments**

Students from the Department study the following courses from other departments:

Department of Commerce: Insurance

Department of Mathematics: Calculus, Linear Algebra

Department of English: Individual and Society, Women empowerment, Mass Communication

Department of Philosophy: Logic, Ethics and Public Domain

Department of Hindi: Aishchik Vishay, Modern Indian Language course, Discipline Centered course, Hindi Language (Higher & Lower)

Department of Sanskrit: Basic Sanskrit, Nationalism, and Indian Literature

Department of History: Indian History and Culture, Ancient Delhi/Medieval, Delhi/Modern Delhi, Environmental Issues in India

Department of Computer Sciences: Introduction to C++

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

We have no courses in collaboration with any other universities, industries, foreign institutions etc.

**8. Details of courses/programmes discontinued (if any) with reasons**

Annual system and Four Year Undergraduate Programme were discontinued as per the university guidelines.

**9. Number of Teaching posts**

Number of Teaching Posts: As on 22<sup>nd</sup> September, 2015

	Sanctioned	Filled
Professors		
Associate Professors	18	8
Assistant Professors		8



10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Total Experience	No. of Ph.D students guided for the last 4 years
Dr. S.K. Laroia	Ph.D	Associate Professor	Development Economics, Microeconomics	44	None
Dr. Anil Kokrady	Ph.D	Associate Professor	Microeconomics, Economic History, Indian Economy, Macroeconomics, Energy Conservation	36	None
Dr. Anand Mittal	Ph.D	Associate Professor	Money and Banking, Indian Economic Development & Policy, Macroeconomics, Microeconomics, Public Finance, Statistics	30	Evaluation of Ph.D
Mrs. Vandana Chaudhary	MA	Associate Professor	Macroeconomics, Microeconomics	35	None
Mrs. Anita Balani	MA	Associate Professor	Statistical Methods, Microeconomics, Macroeconomics	36	None
Mr. CK Nanda	MBE	Associate Professor	Economic History of India, Microeconomics	39	None
Mrs. Alka Kacker	M.Phil (Oxford)	Associate Professor	Macroeconomics, Public Finance, Money & Banking, Indian Economy & Policy	28	None
Mrs. Shailu Singh	MA, Pursuing Ph.D (DSE)	Assistant Professor	National Income Accounting, Microeconomics, Principles of Economics, Introductory Econometrics	24	None
Ms. Hema Kapur	MA, M.Phil, Pursuing Ph.D(DSE)	Associate Professor	Microeconomics, Money & Financial Markets, Macroeconomics, Indian Economy	22	None
Mr. Animesh Nasker	MSc (Economics & Financial Economics), M.Phil, MA	Assistant Professor	Microeconomics, Macroeconomics, Game Theory, International Trade, Financial Economics	09	None
Mrs. Anjali Khurana	MA	Assistant Professor	Economy, State & Society, Indian Economic Development, Macroeconomics, Microeconomics, Mathematics	11	None
Ms. Kapila Mallah	M.Phil, MA	Assistant Professor	Macroeconomics, Microeconomics, International Trade	09	None



Ms. Sucharita Khuntia	M.Phil, MA	Assistant Professor	Public Economics, Macroeconomics, Microeconomics, Indian Economy, International Trade	08	None
Ms. Sonam	MA, Pursuing Ph.D(DSE)	Assistant Professor	Mathematical Economics, Development Economics, International Trade, Indian Economy	06	None
Mrs. Simran Sethi	MA	Assistant Professor	International Trade, Macroeconomics, Development Economics, Microeconomics	06	None
Mrs. Madhvi Moni K	MSc(Economics and Econometrics), MA, Pursuing M.Phil(JNU)	Assistant Professor	Indian Economic Development, Introductory Econometrics, Industry and Agriculture, Microeconomics, Macroeconomics, Economy, State & Society	07	None
Mr. Jyoti Prakash Verma	MA	Assistant Professor	Microeconomics, Economic History of India, Money & Financial Markets, Health & Education, Indian Economy	10	None
Mrs. Venu Gupta	M.Phil	Assistant Professor	Microeconomics, Macroeconomics, Indian Economy	02	None
Ms. Divisha Goyal	MA	Assistant Professor	Macroeconomics, Microeconomics	01 month	None

#### 11. List of senior visiting faculty

None

#### 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

As of now, 16.66% of the lectures and tutorials are handled by ad-hoc faculty

#### 13. Student -Teacher Ratio (programme wise)

25:1 for B.A. (H) Economics

#### 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

N/A

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.**

Dr. S.K.Laroiya, M.A. (Economics), Ph.D.  
C.K.Nanda (M.B.E)  
Anil S.Kokrady, M.A. (Economics), Ph.D.  
Ms.Vandana Choudhary, M.A. (Economics)  
Ms. Anita Balani, M.A. (Economics)  
Ms. Alka Kacker, M.A. (Economics), M.Phil.  
Ms. Shailu Singh, M.A. (Economics)  
Ms. Hema Kapur, M.A. (Economics), M.Phil.  
Dr. Anand Mittal, M.A. (Economics), Ph.D.  
Animesh Naskar, M.A. (Economics), M.Phil.  
Ms. Kapila Mallah, M.A. (Economics), M.Phil.  
Ms. Anjali Khurana, M.A. (Economics)  
Ms. K. Sucharita Khuntia, M.A. (Economics), M.Phil.  
Ms. Simran Sethi , M.A. (Economics)  
Ms. Sonam, M.A. (Economics)  
Ms. Madhavi Moni K., M.A. (Economics)  
Jyoti Prakash Verma, M.A. (Economics)  
Ms. Venu Gupta, M.A. (Economics), M.Phil.  
Ms. Divisha Goyal, M.A. (Economics)

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

None

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

Dr. Sushma Rani & Ms. Preetinder Kaur from the Department of Commerce and Ms. Simran Sethi from the Department of Economics received a grant of Rs. 3.5 Lakhs from the University of Delhi in 2013-14 for an innovation project “ Public Private Puzzle in Education- where the parents want to send their children and why?”

**18. Research Centre /facility recognized by the University**

Yes. Our college has a research centre.



## 19. Publications

**Ms. Alka Kacker**

Minor/Major Research Projects undertaken-

a) Cine Music Director's Association (2010-11)

Conducted a detailed study on Effect of proposed amendments to Copyright Act on the Indian Music Industry. The report was submitted to the Standing Committee of the Parliament that had been constituted to look into the amendments. The research looked at the economic effect of changes in artists and performer's rights as proposed in the amendments. It was a combination of institutional detail with an economic approach. At a time when copyright law, business models in cultural industry and cultural policy are all under pressure and greatly affected by technological change, the study critically examined the impact that the changes will have on the different stakeholders. The report gave a detailed evaluation of the implications of current copyright act and the economic effects of proposed changes using a theoretical microeconomic model and empirical analysis.

b) USAID India IFPS II Project (May-June 2005)

Prepared the Performance Management Plan for the IFPS II project that is currently being implemented in the states of Uttar Pradesh, Uttranchal and Jharkhand. Worked with the futures Group to refine the results framework and select indicators to measure outputs, outcomes and longer term results. Indicators were refined, definitions established and sources and methodologies identified and analysis plans proposed for the life of the project.

c) USAID Armenia Social Transition Program (2001-2005)

Directed the Monitoring and Evaluation Unit for the USAID/Armenia funded Armenia Social Transition Project (ASTP). Worked with the Armenia Social Transition Project team to establish systems for monitoring and evaluating the program in Armenia over a three-year period. The program promoted reforms in the social services, social security and health care policies and delivery systems in Armenia.

Played a key role in conducting a bi-annual national household survey regarding citizen satisfaction with health and social services, and the use of these services.

Designed monitoring systems that tracked access to social services and health care, satisfaction with the quality of services, and actual use of social and health care services on a gender-disaggregated basis.

As a lead analyst for this project, developed an evaluation plan to measure the overall impact of the program over time, designed a customer satisfaction survey, analyzed survey data, and prepared reports and oral briefings on the findings to project staff, USAID, and Government of Armenia clients. Gender, age, and socio-economic status variables were highlighted with regard to the analysis of household survey data. Discrepancies in respect of access to services and socio-economic status between male and female-headed households were identified for policy makers and project implementers to Address.



Worked closely with project lead, USAID/Armenia clients, and with the Ministries of Health and of Social Services to guide the development of survey questionnaires, indicators, and monitoring systems that will best serve the success and the management of the overall project. These findings were instrumental in guiding project strategy and influencing health and social service policies

- d) Prudential Foundation and the Association for Enterprise Opportunity (2000-2003)

Conducted an evaluation and provided technical and management assistance to community organizations responsible for implementing the Prudential Youth Entrepreneurship Program (PYEP), a self-sufficiency program targeting low-income urban populations.

Main responsibility included designing and implementing a three-year evaluation of the program. The PYEP program was a pilot program for youths that was initially tested at two incubators in Newark and Philadelphia. The program aimed at providing self-employment training to youths to either start their own business or increase their employability.

Outcomes from the evaluation helped guide further implementation of the PYEP in additional sites around the country.

- e) Inter-American Development Bank 2002

Conducted a study to identify the role that Ministries of Labor should play in six Caribbean countries and provided policy recommendations for restructuring the labor portfolio so as to effectively support the economic and social dimensions of the globalization process in this region. Based on each of the functional areas identified where the MOL should play a key role, an economic model has been created that will determine the positive and negative impacts of the proposed organizational and institutional changes.

- f) Development Economist, International Labor Organization, 1989-1990. "Women Migrant Workers from Asian Countries: A Brief Review," Research Paper, ILO-ARTEP, 1990
- g) Junior Economist, Planning Commission of India, 1988-1989, "The Impact of Fiscal Incentives on Employment in Indian Industry," Research Paper, Planning Commission of India, 1989

### **Ms. Shailu Singh**

- a) Books written-

- Micro Economic Theory and Applications-Part I, ISBN 81-8985515-8, published by Bookage Publications, H-87, Lalita Park, Laxmi Nagar, Delhi-110092

### **Ms. Hema Kapur**

- a) Papers presented-





- Presented a paper in a seminar on India Macroeconomy on a 'A Structural Macroeconometric Model for India' at JNU, organized by EXIM Bank and JNU Library, CESP, on 12.2.15

b) Books Written-

Micro Economic Theory and Applications- Part I, ISBN 81-8985515-8

Micro Economics II, ISBN 81-924901-05-01

Principles of Micro Economics-B.A.Programme, ISBN 978-81-89855-12-3

Principles of Micro Economics. B.Com. Programme, ISBN: 81-89855-07-7

Publisher-Bookage publications, h-87, Lalita park, laxmi nagar, delhi-110092

**Dr. Anand Mittal**

a) Papers presented-

At National Institute of Management and Accounts (Ministry of Defence, GOI)  
Meerut

b) Books Written-

Mittal, Anand (2003) - Economic Reforms and Capital Market in India, Galgotia publishing Company, New Delhi. ISBN: 81-85989-89-3

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand (ed)(2003)- Managerial Economics, "Text & Cases", Brijwasi Book Distributors & Publishers, New Delhi. ISBN:81-902275-1-3

Chaturvedi, D.D and Mittal, Anand – (ed) (2003) – Macro Economics, Brijwasi Book Distributors & Publishers, New Delhi. ISBN-81-902275-1-2

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand – (ed)(2004) – Business Economics, Theory and Applications, Brijwasi Book Distributors & Publishers, New Delhi. ISBN:81-9022-75-8-0

Chaturvedi, D.D and Mittal, Anand – (ed) (2004) – Macro Economics, Brijwasi Book Distributors & Publishers, New Delhi. ISBN-81-902275-1-2

Chaturvedi, D.D. and Mittal, Anand – (ed) (2005) – "Samastigath Arthshatra" - Brijwasi Book Distributors & Publishers, New Delhi, ISBN-81-90-2275-5-6

Chaturvedi, D.D. and Mittal, Anand – (ed) (2005) – Business Economics II (Macro), (Guru Gobind Singh Indraprastha University Edition) - Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-9022-75-6-4

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand – (ed) (2005) – Business Economics, Theory and Applications, Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-9022-75-8-0



Chaturvedi, D.D and Mittal, Anand – (ed) (2006) – Macro Economics, Brijwasi Book Distributors & Publishers, New Delhi. ISBN-81-902275-1-2

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand (ed) (2006)- Managerial Economics, “Text & Cases”, Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-902275-1-3

Chaturvedi, D.D. and Mittal, Anand – (ed) (2006) – Business Economics II (Macro), (Guru Gobind Singh Indraprastha University Edition) - Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-9022-75-6-4

Chaturvedi, D.D., Rao, Aruna and Mittal, Anand – (ed) (2007) - Principles of Micro Economics, Bookage publications, New Delhi. ISBN: 81-89855-05-0

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand (ed) (2007)- Managerial Economics, “Text & Cases”, Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-902275-1-3

Chaturvedi, D.D. and Mittal, Anand – (ed) (2008) – Principles of Macro Economics, Bookage publications, New Delhi. ISBN: 978-81-89955-10-7

Mittal, Anand and Makol, Hartaj Singh – B.B.E Entrance Test Guide – S.G. Publications, New Delhi

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand (ed)(2008)- Managerial Economics, “Text & Cases Brijwasi Book Distributors & Publishers, New Delhi. ISBN: 81-902275-1-3

Chaturvedi, D.D. and Mittal, Anand – (Hindi-ed) (2009) - “Samastigath Arthshatra ke Shiddhant” – Bookage publications, New Delhi. ISBN: 978-81-89955-10-7

Chaturvedi, D.D., Gupta, S.L. and Mittal, Anand (ed)(2010)- Managerial Economics, “Text & Cases”, Bookage publications, New Delhi. ISBN: 81-902275-1-3

Chaturvedi, D.D. and Mittal, Anand – (ed) (2011) – Principles of Macro Economics , Bookage publications, New Delhi. ISBN: 978-81-89955-10-7

Chaturvedi, D.D. and Mittal, Anand – (ed) (2011) – Principles of Micro Economics , Bookage publications, New Delhi. ISBN: 978-81-89855-05-0

Chaturvedi, D.D. and Mittal, Anand – (Hindi-ed) (2011) - “Samastigath Arthshatra ke Shiddhant” – Bookage publications, New Delhi. ISBN: 978-81-89955-10-7

Chaturvedi, D.D., and Mittal, Anand – (ed) (2015) - Micro Economics, Kitab Mahal Publishers – New Delhi. ISBN: 978-81-225-0773-7

Chaturvedi, D.D., and Mittal, Anand – (ed) (2015) – Principles of Micro Economics-1, Kitab Mahal Publishers – New Delhi. ISBN: 978-81-225-0774-4

Chaturvedi, D.D., and Mittal, Anand – (ed) (2015) – Principles of Macro Economics-1, Kitab Mahal Publishers – New Delhi. ISBN: 978-81-225-0775-1



Chaturvedi, D.D., Mittal, Anand, and Jain, Anuradha (ed) (2015)- Economics I, Scholar Tech Press, MKM Publishers Pvt. Ltd, New Delhi. ISBN: 978-93-82209812

Chaturvedi, D.D., Mittal, Anand; Jain and Kaur, Richa – (ed) (2015) – Introductory Microeconomics- Kitab Mahal Publishers – New Delhi. ISBN: 978-81-225-0783-6

Chaturvedi, D.D., Mittal, Anand, Jain, Anuradha (ed)(2015) - Economics-1, MKM Publishers Pvt. Ltd, New Delhi. ISBN: 978-93-82209-85-0

Chaturvedi, D.D., Mittal, Anand, and Singh, Bharat – (ed)-(2015), “Vyashtigat Arthshastra Ke Sidhant”-1, K.L Malik & Sons Pvt Ltd, New Delhi ISBN: 978-93-82209-86-7

**Animesh Naskar****a) Research Contribution-**

Wrote 10 modules of the paper “Factor Pricing and Distributions” in Advanced Microeconomics of course Economics offered under e- Pathshala Programme.

**b) Faculty Training Programme**

Participated and went for Msc in Economics and Financial Economics at the University of Nottingham, as a part of Young Faculty Training Programme by University of Delhi in 2012.

**Ms. Kapila Mallah****a) Papers presented-**

Presented a paper entitled ‘Promoting women’s workforce participation in the era of Globalization’ in the Conference of the Indian Society of Labor Economics, held in December 17-19, 2011 at the M.L.S. University, Udaipur .

Presented a paper entitled ‘Women Workers in the new Economy: Issues & Challenges’ in the Golden Jubilee Conference of the Indian Society of Labor Economics, held in December 13-15, 2008 at the Giri Institute of Development Studies, Lucknow.

Presented a paper entitled ‘Gender Disparity in Education: An Analytical Study on the Relationship between Odds Ratio & Human Development Index for the State of Rajasthan’ at the Indian Economic Association Conference, to be held on 27-29 December, 2008 at the M.L.S. University, Udaipur.

Presented a paper entitled ‘Employment Opportunities for Urban Women in the Globalized Era’ at the National Conference on Globalization through Gender Lens: Women Workers in Question, organized by Women’s Studies & Research Center, Banasthali University on 28th-30th March, 2007.

**Ms. Anjali Khurana****a) Research Projects undertaken-**



She was associated with National Council of Applied Economic Research (NCAER) from July 2002- June 2004, as Research Assistant and worked on the following research projects –

Domestic Tourism Survey, 2002-03, sponsored by Ministry of Tourism and Culture, GoI

India Rural Infrastructure Report, funded by Sir Ratan Tata Trust

Co-authored an article, “Things to Learn from a Neighbour”, published in the Economic Times daily, dated Saturday, June 28, 2003.

**Ms. K. Sucharita Khuntia****a) Research Projects undertaken-**

She did a short term project on industrial pollution by small scale units in Delhi under the supervision of Prof. Manoj Pant, CITD, JNU.

**Ms. Simran Sethi****a) Research Projects Undertaken-**

Received a grant of Rs. 3.5 lakhs from the University of Delhi for the Innovation Project (2013-14) –Successfully completed the project along with two of my colleagues from the Department of Commerce and ten students of our college on “Public Private Puzzle in Education: Where the Parents Want to send their Children and Why?” The purpose of the project was to identify the factors which are important for selection of any school at the time of admission. In addition to that, the level of emotional intelligence among private and public school teachers has also been studied in this project.

**b) Books Written-**

Micro Economics part II, ISBN: 978-81-924901-5-1, published by Book Age Publications, H-87, Lalita Park, Laxmi Nagar, Delhi- 110092.

**c) Papers Published-**

“Inflation, Inflation Volatility and Economic Growth: The case of India” has been published in The IUP Journal of Applied Economics, Volume XIV No.3 July 2015, ISSN No.0972-6861.

**Ms. Sonam****a) Research Projects Undertaken-**

Wrote e-lessons for ILL in Econometrics

**Ms. Madhavi****a) Faculty Training Program**

Participated and went for Msc in Economics and Econometrics at the University of Nottingham, as a part of Young Faculty Training Programme by University of Delhi in 2012.

**b) Papers presented-**

Presented a paper in the International Conference on Development Prospects of Indian Economy in Jaipur.

**c) Chapters written in Books**

Wheat Market Integration in India: Analysis at the regional and zonal level.

**d) Research Projects Undertaken-**

Written a chapter in Indian Economy for an online course facilitated by ILL, DU and two chapters in Econometrics for a UGC initiative E-pathshala facilitated by Khalsa College, DU.

**Ms.Venu Gupta****a) Papers Published-**

“Keynes: The Return of the Master”, International Journal for Social Development, A quarterly of ISDR., Vol.1 Jul-Sep Issue 3, 2013/Pages 40-44, ISSN 2320-9283

“History of Economic Thought”, International Journal for Social Development, A quarterly of ISDR., Vol.1 Oct-Dec Issue 4, 2013/Pages 121-128, ISSN 2320-9283

“Study of Working Capital Management in Manufacturing firms: A case of SMEs”, Educator the FIMT Journal/Page No.91-97, ISSN No.2277-9736.

“Environmental Policies and International Treaties”, Environmental Crisis, Seminar Proceeding Book 2015, Page No.139-146, ISBN 978-93-84686-03-1.

**b) Books Written-**

Business Economics, ISBN No. 978-93-83334-37-7, A.K.Publishers, Delhi

Business Economics, ISBN No. 978-93-83281-48-0

**20. Areas of consultancy and income generated**

None

**21. Faculty as members in**

Currently our faculty is not a member of National or International Committees.

**22. Student projects**

Percentage of students who have done in-house projects including inter departmental/ programme

100%



**Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies**

Majority of our students are working in corporate sector (more than 40%), almost 15% of our students on average are working in Government/public sector, approximately 5% are self-employed and 30% are pursuing professional degree. Our students find placements in companies like Ernst & Young, Temasek holding, Axiom, Chicago Public Schools, PricewaterhouseCoopers Pvt Ltd, Deutsche bank, Kotak Mahindra Bank, HSBC, ZS Associates, KPMG, Indian Foreign Service, ICRIER, AC Nielsen, etc

**23. Awards / Recognitions received by faculty and students**

**Awards / Recognitions received by faculty:**

**a. Dr. Anil S. Kokrady**

He received the Distinguished Teacher Award by the University of Delhi in 2009

**b. Ms. Alka Kacker**

Awarded the Nehru Centenary British Scholarship in 1991 to study at Oxford University.

Awarded the Cambridge ODA Scholarship in 1991.

Honoured as an Outstanding Student (Joint first) in the M.Phil course at Oxford University on the basis of four written examination and a thesis.

Awarded the Hiralal Bhargava Gold Medal for the Best Student in Economics by the Delhi University in 1987.

Awarded the K.C. Nag Memorial prize for the best student in Economics by the Delhi University in 1987.

Awarded the Jawaharlal Nehru Memorial prize for securing first position in Delhi University in 1987.

Awarded National Scholarship for Post Graduate Studies by the Government of India for two years in 1985.

Awarded the Best student in Economics Award for the academic year 1984-85 by Delhi University.

Awarded National scholarship for the academic year 1984-85 by Delhi University.

Awarded the Best Student in Economics Award for the academic year 1983-84 by Delhi University.

**c. Dr. Anand Mittal**

Selected in Indian Civil Services Exam (I.C.S.) (1987) and allotted to Indian Defence Accounts services. (I.D.A.S.)

Served at key posts as an I.D.A.S. officer, (Ministry of Defence, Govt. of India) as



Class1, Gazetted officer to the Govt. of India (1988-1991) (4years)

Formal training by Govt. of India at key institutes all over the country, including Lal Bahadur Shastri Academy, Mussorie. Bharat Darshan and Military attachment at J&K sector border area as a part of training for I.D.A.S probationary officer.

Trained as I.D.A.S. probationary officer for special accounts training at National Institute of management accounts C.D.A. (Training), Ministry of Defence, Govt. of India, Meerut

d. Ms.Simran Sethi

Cleared NET with Junior Research Fellowship in 2009.

e. Ms.Sonam

Cleared NET with Junior Research Fellowship in 2009.

Received the “Dr. Balbir Singh and Ranjana Singh scholarship” at the Delhi school of economics for two years (2007-09)

Awarded for securing the first position in college in all three years of graduation and University position in the first and second year.

Awarded for securing the highest marks in the subject “Money and Banking” during graduation.

f. Ms. Madhavi Moni

Cleared NET with Junior Research Fellowship in 2008.

#### **Awards/Recognitions received by Students:**

##### Special Academic Prizes

S.No.	Name of The Award	Name of Students	Year of Receiving the Award
1.	Shrimati Indra Kapoor Prize	Sugandha Huria	2011-12
		Rohit Chawla	2012-13
		Aniruddha Ghosh	2013-14
		Aashay Bansal	2014-15
2.	Late Mrs Ruchi Jain Prize	Sneha Diwan	2011-12
		Anirudh Ghosh	2012-13
		Aashay Bansal	2013-14
		Abhishek Jain	2014-15
3.	Shri M.R Kapur Prize	Tarannum Girdhar	2011-12
		Sugandha Huriya	2012-13
		Rohit Chawla	2013-14
		Aniruddha Ghosh	2014-15
		Piyush Agarwal	2014-15
4.	Shri G.C Jangir Prize	Sneha Diwan	2011-12
		Anirudh Ghosh	2012-13
		Aashay Bansal	2013-14
		Abhishek Jain	2014-15





5.	Gyani Hazoor Singh Prize	Sugandha Huri	2011-12
		Rohit Chawla	2012-13
		Aniruddha Ghosh	2013-14
6.	Dr. Anand Mittal Economics Prize	Himani Singhal	2011-12
		Manvi Gupta	2012-13
		Hargungeet Singh	2012-13
		Manvi Gupta	2013-14
		Surbhi Sharma	2013-14
		Aishani Bassi	2014-15
7.	Sh.R.S. Rastogi Prize	Sneha Diwan	2011-12
		Aashay Bansal	2013-14
		Abhishek Jain	2014-15

### **Sports achievement**

#### c) Squash

Abhishek Kumar stood 2<sup>nd</sup> in the Inter College Squash Championship and 2<sup>nd</sup> in Inter University Squash Championship.

Ravish Sharma was a runner up in intercollege squash championship

Ashray Ohri, runners up intercollege squash championship

Avdhesh Singh, runners up intercollege squash championship

Ashray hri, 2<sup>nd</sup> position intercollege squash competition

Ankit sharma, runners up, intercollege squash competition

#### d) Badminton

Shambhavi Bajaj, Ishita Budhiraj – team champion- intercollege championship

Ishita Budhiraja 2<sup>nd</sup> in SRCC sports fest and 1<sup>st</sup> in inter college Badminton Competition.

Sanjeet Singh, won intercollege badminton championship

Ankit Sharma, won intercollege badminton championship

Ankit sharma, winner intercollege badminton championship

Srijan Joshi, Winner team championship in Pilani

Sidharth Rawat, gold in All India Inter University

#### e) Swimming

Ishvender Singh won 2 National Swimming records, All India University Medalist and Captain of Rajasthan State Swimming Team.

Ishwinder - Championship intercollege competition



Saurabh Bali, won gold and silver in intercollege swimming championships

Gaurav Rathi, gold medal, silver and bronze in various intercollege swimming championships, and silver and bronze medal in inter university championships

Saurabh Bali, runners up in intercollege championships

f) Lawn Tennis

Siddharth Rawat, runner up, intercollege lawn tennis championship

Siddharth Rawat, championship at intercollege lawn tennis competition

Siddharth Rawat, All india interuniversity lawn tennis championship

Siddharth Rawat, Represented India at Asia cup held at Bangkok

g) Chess

Rajat Jatana, 3<sup>rd</sup> position intercollege chess

Rajat Jatana, team gold in intercollege chess championship

Prateek Mohan, gold at intercollege chess championship

Abhyudya Raj Purohit, 1<sup>st</sup> position intercollege chess competition

Rajat Jatana, 1<sup>st</sup> position intercollege chess competition, champion in SRCC chess competition

Prateek Mohan, 1<sup>st</sup> position intercollege chess competition

h) Baseball

Ankit Sharma, All India Inter University Baseball Championship, silver medal

### **Merit Cum Need Scholarship**

S.No.	Name of the Scholarship	Students Name	Year of Receiving the Scholarship
1	Basant Ram Rewal R.K Rewal Scholarship	Prince Bagaria	2011-12
2	J.P Guha Scholarship	Megha Arora	2013-14
3	Lajwanti Raj Rani Memorial Scholarship	Saifuheen E	2013-14
4	J.P Guha Scholarship	Rishi Mor	2014-15
5	J.P Guha Scholarship	Pooja Kumari Thakur	2014-15

**ECA Achievements**

Field	Students Name	Year
Western Music	1.Sarthak Joshi	2012-13
	2. Devika Chaturvedi	2012-13
	3.Rajina	2012-13
Hindustani & Carnatic Music	1.Kushagra Om Verma	2011-12
Dramatics	1.K.S Yashaswini	2011-12
	2.Shilpi Kumar	2011-12
	3.Utsav Aggarwal	2012-13
	4.Sheetal Arora	2012-13
	5.Asani Wasi	2012-13
Hindi Debate	1. Saloni Khanna	2011-12
English Debate	1. Debashree Poddar	2011-12
	2 Adhir Sharma	2012-13
	3. Karan Padgaonkar	2013-14
	4 Dhruv Gupta.	2013-14
	5. Angad Dev Roy	2013-14
Environment	1. Shilpi Kumar	2011-12
	2.Neeraj	2011-12
Placement Cell	1. Ayush Nopani	2011-12
	2. Palash Jain	2013-14
Nss	1. Nikunj Maheshwariq	2011-12
	2. Rohan Rai	2011-12
	3. Rohan Rai	2012-13
	4. Nikunj Maheshwari	2012-13
	5.Megha Madan	2012-13
	6. Rashi Sharma	2013-14
	7. Sanjeev Sihag	2014-15
Enactus	1. Aayush Naupani	2012-13
	2.Saumya Chaudhary	2012-13
	3. Shivang Aggarwal	2014-15
Indian Music	1.Kalpana Sharma	2013-14
	2. Damyanti Sen	2013-14
Choreography	1.Lipika Bhargava	2013-14
	2. Venu Sharda	2013-14
	3. Ankit Upadhyay	2013-14
	4. Sarat Nair	2013-14
	5. Ankit Upadhyay	2014-15
	6. Vaishali Sahu	2014-15
	7. Prateek Aneja	2014-15

**Inter-College****1. Music**

Many of our budding economists are active members of the Music Society *Swaranjali*

Abhishek Mittal, Lead Guitarist is a member of the college band Hansraj Projekt. The band won the Battle of Bands in 13 festivals (AIIMS, LSR, NIIT, JMC, KMC, HINDU, CVS, MIRANDA, PGDAV, CBS, SVC, IIT-DELHI, FMS.) Won second position in NIFT and SGGS. 3<sup>rd</sup> in IIT Kanpur

Abhishek Khare and Preksha contributed to the choir winning numerous competitions. 1<sup>st</sup> in DTU, 2<sup>nd</sup> in St Stephen and Matreya and 3<sup>rd</sup> in LSR.

Abhishek Mittal 2<sup>nd</sup> in DTU and 2<sup>nd</sup> in AIIMS instrumental solo, 2015-16

**2. Debate**

Ishita was declared the winner at the KMC Fresher's parliamentary debate and reached the quarter finals level at Punjab Engineering College

Madhav Malhotra reached the semi finals at the SRCC Fresher's Parliamentary Debate and at the IPCW Fresher's Debate. Also he reached the quarter final at the Punjab Engineering College Debate and was declared the 8<sup>th</sup> Best Adjudicator at the Jindal Parliamentary Debate.

Kanika was declared the Best Novice Adjudicator at the Miranda House Conventional debate.

Abhishek Jain was a quarter finalist adjudicator at the *Vivaad IPCW 2014* and SRDF 2014.

Madhav Malhotra represented University of Delhi at the South East Asian Summit on Sustainable development in Bhutan 2014 and presented a paper on the same topic. This year the summit is being held in Colombo, Sri Lanka and Arunita Mitash from the Economics Department has been selected to be a part of the University of Delhi team.

**24. List of eminent academicians and scientists / visitors to the department**

Department of Economics at Hansraj College has invited several eminent academicians over the years:

Dr. Bina Agarwal, Padamshri, Director & Professor of Economics at the Institute of Economic Growth.

Ms. Vinita Deepak, Head of the South Asia Operation of AP Television News.

Prof. Deepak Nayyar, Ex Vice Chancellor University of Delhi

Prof. Isher Judge Ahluwalia, Chairperson, Board of Governors, ICRIER

Dr. Poonam Gupta, Senior Economist, World Bank



Prof. Rajiv Malhotra, School of Public Policy, Jindal University

Prof. B.B. Bhattacharya, Ex Vice Chancellor, JNU

Prof. Ashwani Deshpande, Professor Delhi School of Economics

Prof. S.D Tendulkar, Former Professor, Delhi School of Economics

Dr. Vandana Shiva, Activist

Dr. Mythli Bhusnurmath, Journalist, Economic Times

Dr. M. Narender, General Manager & Director of Indian Overseas Bank

Prof. Aditya Bhattacharya, Head of the Department, Delhi School of Economics

Prof. J. P. Sharma, Head of the Department, Department of Commerce, Delhi School of Economics

Dr. Alok Pandey, Director, Ministry of Finance, Govt. of India

Prof. Jayati Ghosh, CESP, JNU

#### 25. Seminars/ Conferences/Workshops organized & the source of funding

None

#### 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
BA (Honours) Economics	Data available	135	67	68	135	68.18182

\*M = Male \*F = Female

#### 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
BA (Honours) Economics	51	78	6

#### 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

Many students from our department go for higher studies in Economics, Law, and Management etc. Some of them have cleared NET like Divisha Goyal, Sonam, Kopal Gupta, Komal Malik, Deepika Khandpal, Puneet Arora, et al; Defence services like Sapna Sapra and Bhuvanesh Kumar; Government services like Pavni Gupta in Indian Information Service, Hemant Sulaniya in Indian Railway Services, Kiran Khatri in Indian Foreign Services etc. Many have also cleared made it to top B-schools such as IIMs, SP Jain, NMIMS, MDI – Raghav Piyush Mittal, Abhinav Anand, Dikshant Sachdeva, Raghav Kapoor, Rohit Naini et al



### 29. Student progression

Student Progression	Based on our survey(approx.)
UG to PG	75%
PG to M.Phil	2%
PG to Ph.D	1-2%
Ph.D-Post Doctoral	Data not available
Employed	
• Campus Selection	25%
• Other than campus recruitment	Data not available
Self-Employment	5%

### 30. Details of Infrastructural facilities

#### b. Library:

Our college library is equipped with various books on Economics and many important Journals like the Economic and Political Weekly, Yojana, Vikalpa, The Journal for Decision Makers, Dalal Street Investment Journal and Kurukshetra-A Journal of Rural Development. Our students and faculty have access to University of Delhi e-library which has a large number of e-Journals such as JSTOR, Oxford University of Press, SAGE, Cambridge University Press, Science Direct, Springer Link, Annual Reviews and many more.

#### c. Internet facilities for Staff & Students:

Internet and Wi-Fi facility is available to all the faculty members.

#### d. Class rooms with ICT facility:

Department of Economics has been allotted two classrooms with ICT facility

#### e. Laboratories:

Not Applicable

### 31. Number of students receiving financial assistance from college, university, government or other agencies

Five students from Department of Economics have received scholarships from the college. For details please refer to section 23.

### 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Student Enrichment Programmes with external experts:

#### e) Year 2011-12

##### i. Inaugural of the Economics Society held on 15th January, 2012.

Chief Guest - Dr. Bina Agarwal. She was the recipient of Padmashri award in 2008, Leontied Prize Award in 2010. She has held international academic



leadership role in International Society for Ecological Economics, International Economic Association, and International Association for Feminist Economics. She has been a Director of Institute of Economic Growth, New Delhi and currently a professor at University of Manchester.

She spoke on developmental, social issues and challenges such as stagflation, social power, altruism, the happiness index and how by overcoming them, can India achieve a sustained economic growth.

ii. Annual Fest 'Ecolloquium'

Chief Guest- Ms. Vinita Deepak, South Asia Head of AP Television News. She has been Chief Media Advisor, Honorary Media Advisor, and Content Editor at various organizations. His film 'I'm Special', the documentary : 'The Wizard of Needles' has won special award.

Dr. Ashwini Deshpande, Prof. at Delhi School of Economics. Her area of specialization has been on the economics of discrimination and affirmative action issues, with a focus on caste and gender in India. She has published extensively in leading scholarly journals. She is the author of "Grammar of Caste: economic discrimination in contemporary India", OUP, 2011 and "Affirmative Action in India", OUP.

Another major milestone achieved by the Society was the renewed version of the department website, which endeavors to be a source of information and updates on the college and economics department and helps to strengthen association with our alumni.

f) Year 2012-13

i. Inaugural of Economics Society, held in February, 2013.

Chief Guest – M. Narendra, Chairman and Managing director, Indian Overseas Bank. Dr. M. Narendra has travelled widely both within the country as well as abroad. Apart from attending several training programs at premier institutes such as IIM-B and Australian Institute of Banking and Finance, he has received various corporate awards. He has served as the member in RBI's Technical Advisory Committee on Money, Foreign Exchange and Foreign Securities. Some of the awards for which he has been honored are: Best Banker Award (by the SME Chamber of India), Outstanding Banking Leader of the Year Award, Best Banker and Best Public Sector Banker and Best CEO of the Year Award in 2012. Dr. Narendra spoke about the U.S. government shutdown and the current policies introduced by Shri Raghuram Rajan to check the depreciation of the rupee. His speech included his experiences at the IMF conference and the current macroeconomic problems in India.

ii. Annual Fest 'Ecolloquium'

Chief Guest- Professor Rajiv Malhotra, School of Public Policy, Jindal University. He has bridged the world of academics and policy making as a civil servant, both at national and international levels, having worked with Government of India at the Planning Commission and at the Ministry of Finance as a developmental economist.





g) Year 2013-14

i. Inaugural of Economics society, held on 18th October, 2013.

Chief-Guest – M. Narendra, Chairman, and Managing director, Indian Overseas Bank. He spoke on current economic issues, policy issues, challenges and developments with specific reference to Indian Economy.

ii. Annual Fest ‘Ecolloquium’

Chief- Guest – Prof. J P Sharma, Dean of commerce, Delhi School of Economics. He has authored 15 books and around 100 research papers/articles published in several national and international journals of repute. He is the recipient of “Shiksha Gaurav Puraskar” awarded by the Centre for Education Growth and Research, New Delhi.

Guest of Honour – Prof. Aditya Bhattacharya, Head of Economics Department, Delhi School of Economics. He is also a member of Board of Governors, Institute of Economic Growth, Member of Academic Council, Indira Gandhi Institute of Development Research. He has received International Trade Export-Import Bank of India Research Award for the best Ph.D. thesis on foreign trade. He spoke about the Competition Act, 2002 that was enacted by the Parliament of India and governs India competition law. It replaced the MRTP act 1969.

h) Year 2014-15

i. Inaugural of Economics Society

Chief Guest – Dr. Alok Pande, Director, Ministry of Finance, Govt. of India. He is a civil servant of 1994 batch, has experience and specialization is in conceptualization and implementation of financial inclusion strategy having a sound background in Mathematics and Engineering. He discussed the Pradhan Mantri Jan-Dhan Yojna (PMJDY). It is a National Mission for Financial Inclusion to ensure access to financial services, namely, Banking/ Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner. Account can be opened in any bank branch or Business Correspondent (Bank Mitr) outlet.

‘The General Quiz’ a quiz completion on a large scale was organized in October, 2014 with over 100 teams participating in the event.

ii. Annual Fest ‘Ecolloquium’

Chief Guest - Prof. Jayati Ghosh, CESP, JNU. Her specialties include globalization, international finance, employment patterns in developing countries, macroeconomic policy, and issues related to gender and development. She is one of the founders at Economic Research Foundation in New Delhi. She delivered a lecture on Financial Crisis in Greece in which she discussed the possible future impact of Greece crisis on Indian and World economy and the extend of spill over of the crisis on various sectors.



i) Year 2015-16

i. Inaugural of Economics Society in September 2015

Chief Guest- Dr. Poonam Gupta is a Senior Economist in the Development Economics Vice Presidency of the World Bank. Prior to joining the Bank she held the Reserve Bank of India Chair at the National Institute of Public Finance and Policy, Delhi; worked at the International Monetary Fund; and taught at the Delhi School of Economics. She holds a Ph.D. in Economics from the University of Maryland, and a M.A. in Economics from the Delhi School of Economics. Her research has been published in scholarly journals such as the Journal of Finance, the Journal of International Economics, Journal of International Money and Finance and in collected volumes. She spoke about the Macro Economic issues and challenges facing the Indian Economy.

### 33. Teaching methods adopted to improve student learning

Our teachers link the curriculum to the current happenings in the world economy. Emphasize on the applications of the concepts taught. Encourage students to do research on relevant topics and presentations are held in class.

We encourage students to indulge in writing independent research papers related to subjects we teach. Students then present their work in class and even get their papers published on their own accord.

We also initiate group discussions in class on relevant topics and that gives students a platform for presenting independent thinking and to appreciate varied viewpoints.

Our faculty takes special initiative wherein they upload additional articles and as a result of which the students are exposed to extra reading material over and above prescribed by the University.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Our students are actively involved in *Enactus* which is an international non-profit organization that brings together student, academic and business leaders who are committed to using the power of entrepreneurial action to improve the quality of life and standard of living for people in need. Guided by academic advisors and business experts, the student leaders of *Enactus* create and implement community empowerment projects around the globe. The experience not only transforms lives, it helps students develop the kind of talent and perspective that are essential to leadership in an ever-more complicated and challenging world. *Enactus* Hansraj has 3 on-going projects- Project Boond, Project Mithaas and Project Lekhni. Project Boond is an initiative to provide the unprivileged masses, who cannot afford purifiers available in the market, access to clean drinking water through the production of low cost water purifiers that run without electricity.

Our students also work with NSS (National Service Scheme) which works under the Ministry of Youth Affairs and Sports, Government of India. Our sole aim is to inculcate the spirit of service among college students to help individuals, groups and communities



cope up with their problems. NSS Hansraj works four different fields- PADHAKU (Education), Health, Rural Development and Environment and Disaster Management.

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

The department of Economics, widely considered as one of the best in the University, is credited with a highly dynamic and meritorious group of faculty and students. Our faculty members, with sound academic credentials strive continuously to adapt themselves to the dynamic economic environment and equally encourage students to do so, offering them a stimulating environment for overall growth. The faculty takes pride in adopting innovative teaching techniques along with encouraging students to think 'out of the box'. The department constantly strives for excellence, appreciating that knowledge of economics is as much derived from theory as much from real life situations / case studies and encourages students to go beyond the confines of a strict curricula, relating theoretical knowledge to real world phenomena, leading to their holistic development.

The Department of Economics at Hansraj College is a relatively large and multidisciplinary department in the University, with individual faculty members specializing in their respective fields giving the students the benefit of in-depth knowledge and exposure to varied courses and fields of study. Besides, we have a formal 'mentoring' process in place, where each teacher is assigned a set of students; the students are encouraged to bring up and discuss any issue whether pertaining to college / academics or even personal problems they may face. This enables teachers to form relationships for life with students, offering them necessary guidance and support at both professional and personal levels.

The economics alumni has noticeable and active presence across varied fields including policymaking, civil society, education, research, banking and finance, law, marketing and sales and even substantially in creative fields like fine arts and film and theatre. The college and the department encourage active interaction with distinguished alumni from time to time, giving the students tremendous exposure to diverse career options and offering them a motivating environment. The students have in the past been selected in prestigious institutions worldwide like Harvard University, London School of Economics, Cambridge University, Oxford University, Indian Statistical Institute, Delhi School of Economics, Indian Institute of Management, etc. for further study and have been placed in blue-chip companies such as Mckinsey and Co., KPMG, Ernst and Young, UBS, Tata Capital and the like.

The Economics Society, a vibrant and active group of students (with a Staff Adviser), chosen meticulously through a formal selection process gives ample opportunity to students to contribute positively to the department and college through organizing several events and that aids in their holistic development. The students are given tremendous freedom in taking up newer initiatives and designing and organizing events and workshops, instilling in them crucial organization and team building skills and leadership ability. The department believes in entrusting all major responsibilities to student members of the Society spanning finance, IT, creative work, marketing, corporate relations, logistics and fund raising. The Society organizes the much awaited annual economics festival of the year – the Ecolloquium that draws participation from several



colleges of the university, fostering growth and learning in a multicultural and invigorating environment.

Okonomos, the department's widely circulated and read annual journal offers an excellent opportunity to students and teachers to present their research and views. It hones the students' creative writing and editing skills and gives them a formal platform to present views not just on economic and business events and policies, but other general areas also. The 'Yearbook' is another such initiative of the students that is enthusiastically compiled and read by students and teachers alike. The students are active participants of groups and societies like ENACTUS and NSS, where they get a chance to contribute positively to society and community service and become sensitized to several issues, particularly those faced by the underprivileged. Apart from that the students are involved with Drama, debating and choreography societies, among many others.

**Weaknesses:**

The department feels the need to formally engage with industry to train students as a routine exercise. When students work on live projects, they develop their critical and logical thinking skills and are able to learn in a more stimulating environment.

**Opportunities and challenges:**

The very dynamic and complex economic environment presents an opportunity as well a challenge to us to offer many more specialized courses and the department is committed to doing so in the future. The department particularly recognizes the increasing emphasis that needs to be placed on fields like environment, law and economics and specialized areas in finance and econometrics. This raises additional infrastructural requirements in terms of more computer labs, availability of statistical /econometric packages etc. which we hope to satisfy in the future. This also entails further intensive training for teachers.

**Future Plans:**

Try to bridge the gap between classroom teaching and real world by organizing more seminars, workshops and industry interaction with the experts.

Encouraging our faculty members and students to take up research and special focus on academic writing like reviewing and writing journal articles.

Many students from our department go for higher studies in Economics, Law and Management, etc and some get very good placements in the third year of graduation itself. A special effort will be made to create the database of alumni.



## EVALUATIVE REPORT OF THE DEPARTMENT OF ENGLISH

1. **Name of the department:** Department of English
2. **Year of Establishment:** 1948
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG – B.A. (Honours) English; B.A. (Programme) English

PG – M.A. English

4. **Names of Interdisciplinary courses and the departments/units involved**

The Department of English offers the following courses:

To the Departments of Hindi and Sanskrit: English (Qualifying Language Course)

To all Departments: English (Credit Language Course)

To the Departments of Commerce, Mathematics, Hindi, Economics and History: Cultural Diversity in India (Concurrent Course)

To the Department of Hindi and History: Modern Indian literature (Discipline Centered Concurrent Course)

To the Department of B.A. (Programme): Advanced English (across two semesters), Intermediate English (across two semesters), and Language, Literature and Culture: Foundation Course (across two semesters).

To the Department of Commerce: Business Communication (Core Course)

To the Departments of Economics and History: Individual and Society (Interdisciplinary Course)

To all Science Departments: Technical Communication

5. **Annual/ semester/choice based credit system (programme wise)**

Semester

6. **Participation of the department in the courses offered by other departments**

Students from the English Department study the following courses from other departments:

Department of Philosophy: Ethics in Public Domain (Concurrent Course), Formal Logic (Discipline Centered Course)

Department of Economics: Principles of Economics (Concurrent Course)

Department of History: Cultural History of Modern India (Concurrent Course)



Department of Hindi: Hindi (Higher, Lower) (Qualifying Language Course)

Department of Zoology: Environmental Studies (Credit Course)

**7. Courses in collaboration with other universities, industries, foreign institutions, etc.**

Not permitted as per University Ordinance

**8. Details of courses/programmes discontinued (if any) with reasons**

Annual system was discontinued in 2010. The last batch graduated in April 2013.

Four Year Undergraduate Programme (FYUP) was discontinued in 2014 due to Directives from DU.

B.A. (Programme) was discontinued in 2013 under the FYUP and reintroduced in 2014.

**9. Number of Teaching posts**

	Sanctioned	Filled
<b>Professors</b>		
<b>Associate Professors</b>	14	5
<b>Assistant Professors</b>		8

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PH.D. Students guided for the last 4 years
Nivedita Sen	Ph.D	Associate Professor	Translation and children's literature	37	None
Sanjay Kumar	Ph.D	Associate Professor	Activist theatre Dr.ama and theories of Dr.ama, Literary theory	31	None
Meenakshi Malhotra	Ph.D	Associate Professor	19th Century Novel, Women's Writing and Life writing, Women's Studies	28	None
Nilofer Kaul	Ph.D	Associate Professor	Psychoanalysis and Gender	22	None
Sanjiv Nandan Prasad	M.Phil	Associate Professor	Pedagogy and Literary Theory	19	None



Mithuraaj Dhusiya	M.Phil	Assistant Professor	Film studies, Gender studies, Sexuality studies, Women's writing and Cultural studies	10.5	None
Prachee Dewri	M.Phil	Assistant Professor	Theatre and performance studies	10.5	None
Sabitha T.P.	M.Phil	Assistant Professor	Company painting and Landscape art	12	None
Maitri Baruah	M.Phil	Assistant Professor	Sports and Literature, Performance Studies	12	None
Nabanita Charkraborty	M.Phil	Assistant Professor	Early modern English studies, Modern literature, Political theory and rhetoric	10	None
Arnab Dasgupta	M.Phil	Assistant Professor	Print cultures in colonial Assam and Bengal, The novel in 19th C India, Cultures of the visual	9	None
Priyanka Verma	M.Phil	Assistant Professor	Contemporary Literature, European Dr.ama	9	None
Himanshu Kumar	M.Phil	Assistant Professor	Children's Literature, Translation Studies	5	None
Vaibhav Iype Parel	M.Phil	Assistant Professor (Ad hoc)	Indology and theology	7	None
Supurna Dasgupta	MA	Assistant Professor (Ad hoc)	Translation and Subaltern Studies	1.5	None
Shivani Mutneja	M.Phil	Assistant Professor (Ad hoc)	Film Studies	4	None
Ruchi Sharma	M.Phil	Assistant Professor (Ad hoc)	Postcolonial theory and Gender studies	7.5	None
Mun Lun Kim	M.Phil	Assistant Professor (Ad hoc)	Theology and Gender studies	2 months	None



**11. List of senior visiting faculty**

None

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.**

Approximately 13% lectures and tutorials for B.A. (Honors) English were delivered by temporary faculty since 2011.

72.5% of English lectures and tutorials for B.A. (Programme) were delivered by temporary faculty since 2011.

**13. Student -Teacher Ratio (programme wise)**

B.A. (Honours) English- 12:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Not required by the Department

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.**

Nivedita Sen: M.A. (English), M.Phil. (English), Ph.D. (Modern Indian Literature)

Sanjay Kumar: M.A. (English), M.Phil. (English), Ph.D. (Arts & Aesthetics)

Meenakshi Malhotra: M.A. (English), M.Phil. (English), Ph. D. (English)

Nilofer Kaul: M.A. (English), M.Phil. (English), Ph. D. (English)

Sanjiv Nandan Prasad: M.A. (English), M.Phil. (English)

Mithuraaj Dhusiya: M.A. (English), M.Phil. (English)

Prachee Dewri: M.A. (English), M.Phil. (English)

Sabitha T. P. : M.A. (English), M.Phil. (English)

Maitri Baruah: M.A. (English), M.Phil. (English)

Nabanita Chakraborty: M.A. (English), M.Phil. (English)

Arnab Dasgupta: M.A. (English), M.Phil. (English)

Priyanka Verma: M.A. (English), M.Phil. (English)

Himanshu Kumar: M.A. (English), M.Phil. (English)

Vaibhav Iype Parel: M.A. (English), M.Phil. (English)

Supurna Dasgupta: M.A. (English)

Shivani Mutneja: M.A. (English), M.Phil. (Cinema Studies)



Ruchi Sharma: M.A. (English), M.Phil. (English)

Mun L Kim: M.A. (English): Presently not employed with Hansraj

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

a) National funding agencies: None

b) International funding agencies and grants received: None

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

None

**18. Research Centre /facility recognized by the University**

None

**19. Publications:**

S.No.	Name of Faculty	Number of Publications	In Peer-Reviewed Journals	Available on International Databases	Nature of Publication	Impact factor/ H-Index
1	Nivedita Sen	42	18		Books: 7 Book Review: 24 Critical Essay: 6 Chapter in books: 5	
2.	Sanjay Kumar	11	9		Co-edited books:2 Critical essays: 9	
3.	Meenakshi Malhotra	9	0		Book Review:2 Chapter in books: 7	
4.	Nilofer Kaul	1			Chapter in book: 1	
5.	Sanjiv Nandan Prasad	9			Monographs: 4 Book edited: 1 Books: 4	
6.	Mithuraaj Dhusiya	9	7		Critical essays: 7 Chapter in book: 2	



7.	Prachee Dewri	6	2		Critical essays: 5 Chapter in book: 1	
8.	Sabitha T.P	0			0	
9.	Maitri Baruah	1			Chapter in Book: 1	
10.	Nabanita Chakraborty	1			Chapter in Book: 1	
11.	Arnab Dasgupta	0			0	
12.	Priyanka Verma	0			0	
13.	Himanshu Kumar	0			0	
14.	Vaibhav I. Parel	2 (co-authored)	1		Critical essay: 1 Chapter in Book: 1	
15.	Supurna Dasgupta	2	1		Critical essay: 1 Book review: 1	
16.	Shivani Mutneja	3	1		Critical essays: 1 Chapter in book: 2	
17.	Ruchi Sharma	2			Critical essay: 1 Chapter in book: 1	
18.	Mun Lun Kim	0			0	

## 20. Areas of consultancy and income generated

None

## 21. Faculty as members in

### i) National Committees:

Dr. Meenakshi Malhotra:

Member, Curriculum Framing Committee for M. A. (Gender Studies), IGNOU.

Mr. Sanjiv Nandan Prasad

Subject Expert Committee, CISCE, 2009.

### j) International Committees:

Dr. Sanjay Kumar



Member, International Volunteer Leadership Programme, United States Federal Government Programme for potential world leaders (Social Change through Arts), Washington DC, New York, Minneapolis, Honolulu, 2011.

Member (Organising Committee), Performing the World, New York, 2014.

Member (Consultation Committee), WYP, Leeds, 2011.

Member (Resident Consultant), Axis Balluymmin, Dublin, 2013.

Resident, Bellagio Centre (Rockefeller Foundation), Bellagio, Italy, 2010.

k) Editorial Boards:

None

### 22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

100%

Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

About 20% of students have been placed for projects with media houses like magazines, newspapers, television channels, NGOs, etc. They have completed internships with organizations like CNN-IBN, NDTV, CRY, Rajiv Gandhi Foundation, Shakti Shalini NGO, The Danceworx, Barry John Acting Studio, DU Community Radio, DU Beat, Campus Connect, Campus Diaries, TheoryBrew.com, Bluegape.com, Times of India, Population Services International, The Hindu, Hindustan Times, BloodConnect, TeachIndia etc.

### 23. Awards / Recognitions received by faculty and students

Arnab Dasgupta awarded Best Teacher Award by University of Delhi, 2014

Maitri Baruah & Nabanita Chakraborty received Charles Wallace short term Research Fellowships in 2013 and 2014 respectively.

Supurna Dasgupta awarded The Second Best Research Paper by a Young Scholar in the Department of English conference held in September 2015.

Shivani Mutneja was awarded the JRF in December 2013.

**Academics Awards (Students):**

Year	Scholarships	Academic Prizes	Special Academic Prizes	ECA Prizes	Sports Prizes
2011-12	0	5	7	10	3
2012-13	0	5	7	12	3
2013-14	0	5	7	10	5
2014-15	2	15	6	5	5

**24. List of eminent academicians and scientists / visitors to the department**

The Department of English has hosted several reputed academicians over the years from India as well as abroad. A list of a few selected visitors follows:

Prof. Ashish Nandy, Sociologist

Prof. Supriya Choudhury , Professor Emerita, Jadavpur University

Prof. Shirshendu Chakraborty, Department of English, University of Delhi

Prof. Udaya Kumar, Jawaharlal Nehru University

Prof. Tridip Suhrud, Centre for the Study of Social Sciences, Kolkata

Dr. Rajarshi Dasgupta, Jawaharlal Nehru University.

Prof. Mrinal Miri, National Advisory Council, New Delhi

Prof. Sambudha Sen, Professor, Shiv Nadar University.

Prof. Susie Tharu, Anveshi Research Centre for Women's Studies, Hyderabad

Dr. Manas Ray, Centre for Studies in Social Sciences, Kolkata

Dr. P. K. Datta, Department of Political Science, University of Delhi.

Prof. Amlan Dasgupta, Department of English. Jadavpur University

Prof. Tanika Sarkar, Jawaharlal Nehru University

Dr. Prasanta Chakravarty, Department of English, University of Delhi.

Prof. Gopal Guru, Jawaharlal Nehru University

Ms. Maya Sharma Vikalp Women's Group, Vadodara

Prof. Sanjay Srivastava, Institute of Economic Growth, Delhi

Mr. Lawrence Liang, Alternative Law Forum, Bengaluru

Ms. Paromita Vohra, Documentary Filmmaker, Mumbai

Ms. Urvashi Butalia, Publishing House, New Delhi



Dr. Anoop Dhar, Ambedkar University, Delhi.

Ms. Pramada Menon, Activist & Performer

Mr. Sanjay Kak, Film Maker

Mr. Pankaj Butalia, Film Maker

Mr. Gowhar Faizili, Independent Scholar

Dr. Christel R. Devadawson, Department of English, University of Delhi

Dr. Suroopa Mukherjee, Department of English, Hindu College.

Mr. Nikhil Yadav, Sri Venkateswara College, Delhi.

Dr. Rajinder Kaur, Rutgers University.

Mr. Aruni Kashyap, Ashoka University.

Sanjay Kak, Film Maker

## 25. Seminars/ Conferences/Workshops organized & the source of funding

### 1) National

The English Department organised a three-day conference titled 'Constructions of the self: Theories, Contexts, Practices'. The keynote speaker was Prof. Ashish Nandy. Among the other speakers were Mrinal Miri, Susie Tharu, Supriya Choudhuri, Tridip Suhrud. It was funded by UGC, Sahitya Akademi and the Department of English, University of Delhi.

The department organised a workshop on gender and sexuality over two days with noted activist Ms. Pramada Menon. The event was well attended and provided a space for an engaging discussion on a plethora of issues.

Aruni Kashyap was invited by the department for a one day workshop on creative writing.

### m) International:

None

## 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B.A.(Hons.) English	Data not available	61	24	37	61	63.3803

\*M = Male \*F = Female

**27. Diversity of Students**

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B.A.(Hons.)English	40	19	2

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?**

Since we are an undergraduate college, students do not qualify for the above mentioned competitive examinations during their tenure at Hansraj, and information is not available. Information regarding students who have cleared Civil services is not available.

**29. Student progression**

Student Progression	Against % enrolled
UG to PG	25%
PG to M. Phil.	Data not available
PG to Ph. D.	Data not available
Ph. D. to Post-Doctoral	Data not available
Employed Campus Selection Other than campus recruitment	Data not available
Entrepreneurship/ Self-employment	Data not available

**30. Details of Infrastructural facilities****f. Library**

The English section of the library purchases books worth Rs. 60,000/- over the course of an academic year. Faculty members and students also have access to a number of online journals, books, and accessibility to libraries through DU Online Library.

**g. Internet facilities for Staff & Students**

The college is Wi-Fi enabled. Laptops with internet facilities are available for faculty at all times for teaching/research. Faculty can also get laptops issued for classroom teaching and related work. Further, a large number of computers are available for students in the library, reference section and laboratories, with Internet, to work on their assignments.

**h. Class rooms with ICT facility**

The English Department tries to schedule some of its classes in rooms which have ICT facilities to further an audio-visual experience of the taught matter.

**i. Laboratories**

None required by the Department





**31. Number of students receiving financial assistance from college, university, government or other agencies**

1 student

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

The Department organises programmes and events such academic meets, paper presentations, lectures, movie screenings etc. for student enrichment.

**a) Seminars**

In 2010-11, the Department organised a three-day conference titled 'Constructions of the self: Theories, Contexts, Practices'. The keynote speaker was Prof. Ashish Nandy. Among the other speakers were Mrinal Miri, Susie Tharu, Udaya Kumar, Supriya Choudhuri, Tridip Suhrud. It was funded by UGC, Sahitya Akademi and the Department of English, University of Delhi.

**b) Lectures**

The department periodically invites experts from various literary and interdisciplinary fields to deliver lectures and lecture-demonstrations for the students and members of faculty. Some of the scholars and artists who have visited us are Udaya Kumar (Department of English, DU), Sambudha Sen (Department of English, DU), Pankaj Butalia (film-maker), Pramada Menon (Activist), Anup Dhar (School of Humanities, AUD), Aruni Kashyap (Asoka University), Sutapa Dutta (Department of English, Gargi College), Sanjay Rajoura (Performer) among others.

**c) Annual Academic Meet**

The department's annual festival 'LitAmantes' witnesses large participation from across the university. The event is organized over two days and includes exciting events such as quizzes, debates, writing workshops, panel discussions, book and bake stalls and other fun learning activities. In 2014-15, LitAmantes included a panel discussion on Kashmir by Sanjay Kak, Pankaj Butalia and Gauhar Faizili. Media studies, sociological analysis and local stories were brought together succinctly in the lectures and the lively discussion that followed in the course of the panel. The students subsequently held a literary quiz for participants from across the city including audio and visual rounds which highlighted the inherent interdisciplinary potential of a discipline such as ours. In 2013-14, LitAmantes had invited the Kirorimal Dramatics Society 'The Players' to perform a play called 'Room for Doubt' for members of the college community. Of course, the Hansraj Dramatics Society in itself also showed great enthusiasm by putting up a street play of the title 'Rehayi' highlighting multiple social issues which connect our social realities with the stories we tell. In 2012-13, LitAmantes included an insightful discussion titled 'Practices of Reading, Writing and Publishing Children's Literature': the panelists were Dr. Christel Devadawson from the Department of English, DU, Dr. Suroopa Mukherjee from the Department of English, Hindu College, Ms Anushka Ravishankar, Co-Founder of Duckbill Publishers, and Dr. Nivedita Sen, Department of English, Hansraj College.



### 33. Teaching methods adopted to improve student learning

Most of our faculty members have received training from experts from more than one field. This has paved the way for innovative pedagogic methods being adopted within classrooms whose impact inevitably spills the boundaries of the classroom space. Dr. Nivedita Sen, who has specialized in and has translated multiple texts, especially those pertaining to children's literature, brings a sense of the cultural and linguistic diversity that she has access to within the classroom to discuss the immensely heterogeneous thematics that one deals with within our discipline. Dr. Sanjay Kumar, a professional theatre artist and trainer, uses the performative method to enrich the classroom experience of the students: making them participate in the performance of the texts which they are made to study as part of their curriculum. Nevertheless, his lucid and extraordinarily entertaining classes are never devoid of the kind of complexity that such intermedial interaction with the texts invite. Dr. Meenakshi Malhotra encourages active student participation through the format of presentations in her tutorials whereby the confidence of the students insofar as articulation of their opinion and analyses is concerned is advanced along with valuable feedback from their teacher and peers. Dr. Nilofer Kaul is not just a much-beloved teacher, but also a trained psychoanalyst: this has enlarged the scope of learning for a lot of our students. She has used inter-disciplinary methodology in teaching literature with a psychoanalytic emphasis, which is an upcoming field in modern literary scholarship that has received much acceptance and appreciation in national and global educational circuits, ranging from institutions in Mumbai to the University of Warwick. Sanjiv Nandan Prasad is heavily invested in pedagogic methods and uses the feedback and action-oriented mechanisms to enrich and evolve his teaching strategies. Among the Assistant Professors, Sabitha T.P. and Arnab Dasgupta are heavily invested in visual cultures, and their classes are permeated by discussions which are just as related to the texts at hand as much as with the visual practices which surround them.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Dr. Sanjay Kumar is deeply interested in the cause of conflict-resolution through the finer arts, in his case, the theatre. This kind of social investment of an academician is of central ethical value to the life of an institution. He encourages his students to participate in the various theatre activities which he brings to bear upon the multiple conflicts that plague the society today. Some of the workshops and seminars which he has attended at a global level have witnessed tremendous support for extension activities such as these. In 2011, at Lincolnshire UK he conducted a performance-presentation by the title "Dramatizing an Evolving Consciousness" whereby he discussed the heinous case of the Nithari Killings. Similarly, through the experience of his own theatre group Pandies as also with his many years of experience with the theatre scene in India and abroad, he presented a paper at Greece in 2013 about "Performing with India's Platform Young: The Viewing of Politics and Politics of Viewing".

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

Hansraj College is deeply concerned about securing the future of its students. The Department of English is no exception in sharing such concern. Although we understand that our students have various other commitments such as extra-curricular activities and



internships, we try to ensure regularity within the classroom so that there is never a lacuna in the continuity of their academic pursuits. We always encourage a lively classroom space where students can approach their teachers freely and discuss issues about and around the texts that they have been reading. The English Society core members and office-bearers are elected in a democratic fashion, regular student-faculty meetings are held to discuss the extra-academic events that are to be organized and hosted by the department, and the opinions and demands of the students about the nature of events to be organized are duly taken into consideration. Thus we try to develop and preserve a democratic ethos in the internal functioning of the department. There is also a heavy emphasis on interdisciplinary in our classroom teaching whereby film screenings, poetry readings and discussions on paintings are deployed to provide the students with a vibrant and constantly evolving understanding of the texts which they study.

**Weaknesses:**

One of the things that the English department rues is the lack of adequate infrastructure which would have allowed us to engage in discussions and pedagogic methods of a nature which the current dearth does not permit. We do not have a space allocated for a department room or a department library which students and members of faculty could have developed as a space for discussions and small group meetings beyond the classroom about specific issues which the time of the class does not allow us. The department library could have been developed in a far more autonomous manner keeping in mind not just the syllabus but also the research potential of our talented students and faculty members. The lack of ICT-enabled rooms leads to a scramble for the few rooms where the audio-visual infrastructure is available, and so there is always a very real gap between the number of screenings and discussions which we wish to hold and the number that becomes realistically feasible. Finally, something remains to be said about the inadequacies of the admission process where only a blanket decision is imposed on the basis of marks and not any real test of aptitude for a subject as sensitive and nuanced such as Literature.

**Opportunities:**

The English department is always on the lookout for opportunities to connect to other departments of humanities and social sciences, both within the college and outside. The many workshops and seminars that we have held in the past with eminent personalities from various institutions have inspired generations of students to engage with the subject with a strong sense of social relevance. The department is already planning seminars in collaboration with other departments of the college. The Generic Elective courses that we offer under the CBCS (Media and Mass Communication, and Women and Empowerment) have been immensely successful in drawing students from across the whole college. Under the aegis of these two courses we have the opportunity to invite guest speakers and hold workshops about the various themes of critical socio-political importance that application based courses such as these necessitate. Some of the students of our department have taken up the fantastic offer of internship extended by the DU Community Radio and the feedback that we have received from them about the sense of being connected to the larger university community has been truly overwhelming.

**Challenges:**

The major problem of any classroom is the demographic diversity. A lot of students who take admission into English Literature do so as a matter of sheer convenience rather than any real interest. Some students also come from less privileged backgrounds where their exposure to canonical texts such as those in the syllabus is minimal. We also have a considerable number of students who come from small towns and feel completely lost within the space of the metropolis. To deal with a class that hosts such diversity requires not just sensitivity but also a lot of time which the immensity of the syllabus and the limited time of the semester do not allow us. The challenge lies in attempting to get all the students within the class adequately excited about their coursework such that new ideas may be generated.

Another issue that English students often face is the lack of employment opportunities: whether within academia or beyond it. One has to think of alternative placement opportunities for students which the college can provide exposure for.

Finally, in this sort of rat-race, it is important to inculcate in our students the value of rigorous education which thinks beyond the simplistic paradigm of marks. Hence the almost automatic recourse that they take to easy internet resources for the sake of examination preparation and assignments need to be prevented with a larger ethical sense of the value of knowledge and learning. This is a challenge that we as teachers face and seek to ameliorate every day.

**Future Plans:**

The challenges listed above necessitate a set of future plans which are absolutely inevitable. To begin with, the department must consider scheduling and conducting regular remedial classes. This will reduce the disparities within the classroom space: and yet not completely diminish the kind of cultural heterogeneity that a diverse class enjoys. We have plans to invite reliable and reputed publishing houses and media houses to provide our students with internships in their offices depending on the specific aptitude of the students and the requirement of those organizations. This will help the students develop a sense of the real job scenario beyond the insulated space of the academic institute.

Finally we have, as always, the plans for an annual department trip which has proved to be in the past the perfect space for community- building a sense of departmental camaraderie



## EVALUATIVE REPORT OF THE DEPARTMENT OF HINDI

1. Name of the department: Department of Hindi
2. Year of Establishment: 1948
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

B.A. (HONS.) HINDI

M.A. (HINDI)

4. Names of Interdisciplinary courses and the departments/units involved

In Current Session

S.No.	Name of Paper	Courses and Department
1.	Generic Elective - Hindi Cinema Aur Uska Adhyayan	All Hons. Courses (Ist Sem) Other than Hindi Hons. First Year
2.	Generic Elective - Lokpriya Sahitya	All Hons. Courses (Ist Sem) Other than Hindi Hons. First Year
3.	Hindi Qualifying (Higher)	B.Sc. Hons. Mathematics 2 <sup>nd</sup> Year Semester III
4.	Hindi Qualifying (Lower)	B.Sc. Hons. Mathematics 2 <sup>nd</sup> Year Semester III
5.	Concurrent Course ( Hindi Bhasha Aur Uska Sahitya)	All Hons. Courses (III sem) Other Than Hindi Hons.
6.	M.I.L.	All Hons. Course ( Science Departments)

Courses In Past Four Years

S.No.	Name of Paper	Courses and Department
1.	Mass Communication	B.A.(Prog.) III yr
2.	Foundation Course ( Language, Literature and Culture)	B.A.(Prog.) II yr
3.	Hindi Qualifying (Higher)	B.Sc. Hons. Mathematics 2 <sup>nd</sup> Year Semester III
4.	Hindi Qualifying (Lower)	B.Sc. Hons. Mathematics 2 <sup>nd</sup> Year Semester III
5.	Concurrent Course ( Hindi Sahitya)	All Hons. Courses (III sem) Other Than Hindi Hons.
6.	Hindi Credit	All Hons. Courses (II sem) Other Than Hindi Hons.
7.	Language, Literature And Culture	All Hons. Courses (II sem) Other Than Hindi Hons.
8.	Mil Hindi 'A'	B.A. Prog. I Yr. And II Yr
9.	Mil Hindi 'B'	B.A. Prog. I Yr. And II Year
10.	Mil Hindi 'C'	B.A. Prog. Ist Yr. And II Yr.
11.	Foundation Course (Fyup)	All Hons. I St Year
12.	Allied Hindi (Fyup)	All Hons. First Yr.



### 5. Annual/ semester/choice based credit system (programme wise)

CBCS For B.A.(H) Hindi First Year, second Year Hindi Hons. Semester, III Yr. Hindi Hons. In Restructured B.A. Hons. Erstwhile FYUP, M.A. (Hindi) Previous And Final Semester.

### 6. Participation of the department in the courses offered by other departments

History, Sanskrit, Philosophy, English, Economics, Computer, Commerce And Also Other Science Subjects in First Year (CBCS)

### 7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

### 8. Details of courses/programmes discontinued (if any) with reasons

Nil

### 9. Number of Teaching posts

Sanctioned – 11

Filled – 10 ( 3 ASSOCIATE PROFESSOR AND 7 ASSISTANT PROFESSOR)

( 5 permanent, 5 ad-hoc)

	Sanctioned	Filled
Professors		
Associate Professors	11	3
Assistant Professors		7

### 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 years
Dr. Rama	M.A., M.Phil, Ph.D	Associate Professor	Mass communication	26 yrs	5
Dr. Sudhanshu Kr. Shukla	M.A., M.Phil, Ph.D	Associate Professor	Natak aur kavyashastra	17 yrs	1
Dr. Rajmohini Sagar	M.A., M.Phil, Ph.D	Associate Professor	Bhaktikavya	16 yrs.	00
Dr. Neetu Sharma	M.A., M.Phil, Ph.D	Assistant Professor	Natak	10 yrs.	00
Dr. Rajesh Kumar Sharma	M.A., M.Phil, Ph.D	Assistant Professor	Adhunik hindi sahitya	7 yrs.	00
Dr. Nritya Gopal Sharma	M.A., M.Phil, Ph.D	Assistant Professor	Madhyakaal	12 yrs.	00
Dr. Prem Prakash Meena	M.A., M.Phil, Ph.D	Assistant Professor	Media	6.5 yrs	00





Dr. Vedprakash	M.A., M.Phil, Ph.D	Assistant Professor	Hindi sahitya ka itihās	11 yrs.	00
Dr. Ramashankar Kushwaha	M.A., M.Phil, Ph.D	Assistant Professor	Adhunik chintan aur sahitya (gadya)	4.5 yrs.	00
Dr. Vijay Kumar Mishra	M.A., M.Phil, Ph.D	Assistant Professor	Media and Cinema	3 yrs.	00

## 11. List of senior visiting faculty

Nil

## 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

Nil

## 13. Student -Teacher Ratio (programme wise)

16:1

## 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Nil

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.

Names of Teaching Faculty	Qualifications
Dr. Rama	M.A., M.PHIL, Ph.D
Dr. Sudhanshuhu Kr. Shukla	M.A., M.PHIL, Ph.D
Dr. Rajmohini Sagar	M.A., M.PHIL, Ph.D
Dr. Neetu Sharma	M.A., M.PHIL, Ph.D
Dr. Rajesh Kumar Sharma	M.A., M.PHIL, Ph.D
Dr. Nritya Gopal Sharma	M.A., M.PHIL, Ph.D
Dr. Prem Prakash Meena	M.A., M.PHIL, Ph.D
Dr. Vedprakash	M.A., M.PHIL, Ph.D
Dr. Ramashankar Kushwaha	M.A., M.PHIL, Ph.D
Dr. Vijay Kumar Mishra	M.A., M.PHIL, Ph.D

## 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Name	Project type	Funding agency	Grant
Dr. Rama	Major	UGC	12,99,600/-
	Consultancy	Disha foundation	2,90,000/-

## 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Nil





## 18. Research Centre /facility recognized by the University

NA

## 19. Publications:

n) Publications per faculty

S.No.	Name of Faculty	In refereed journals	Chapters in books/e-resources	Books edited/ written
1	Dr. Rama	14	3	9
2	Dr. Sudhanshu Kumar Shukla	14	00	21
3	Dr. Rajmohini Sagar	5	00	00
4	Dr. Neetu	3	1	00
5	Dr. Rajesh Kumar Sharma	00	00	00
6	Dr. Nrityagopal Sharma	10	00	2
7	Dr. Prem Prakash Meena	6	3	00
8	Dr. Vedprakash	00	00	1
9	Dr. Ramashankar Kushwaha	4	00	00
10	Dr. Vijay Kumar Mishra	7	1	1

## 20. Areas of consultancy and income generated: NA

## 21. Faculty as members in

- a) National committees
- b) International Committees
- c) Editorial Board

NA

## 22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

More than 300

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Nil

## 23. Awards / Recognitions received by faculty and students

Students – 15 (per year approx.)

Faculty - 10



**24. List of eminent academicians and scientists / visitors to the department**

Om Thanvi – Jansatta  
Ravish Kumar – NDTV  
Dr. Kumud Sharma – Hindi Dept. D.U.  
Prof. Harimohan Sharma – Hindi Department, D.U.  
Sree Kamal Kishor Goyanaka – KenDr.iya Hindi Sansthan  
Anuradha Chaudhary – News 24  
Daya Prakash Sinha – Ex. Administrator, Govt. Of India  
Dr. Mahendra Sharma Surya –Writer  
Mukesh Agrawal – Bhashavid  
Sree Kiran Rijuju – Mos. Home Affairs, Govt. Of India  
Rakesh Bedi – Actor  
Nitish Bharadwaj – Actor  
Kashmeera Shah – Actress  
Alka Sinha – Writer  
Sudhanshu Ranjan – Journalist  
Ramjilal Jangir - Bharteeya Jansanchar Sangh  
Pradeep Mathur – Media Expert  
Shesh Narayan Singh – Snr. Journalist  
Ganga Prasad Vimal – Writer  
Alpana Mishra - Hindi Dept. D.U.  
Nidhi Kulshreshth – T.V. Anchor  
Suman Kesari – Poet  
Arvind Gaur – Asmita Theatre  
Vinod Bhardwaj – Cinema Expert  
Satyaketu Sankrit – Academician  
Sanjeev Jayaswal – Actor  
Dr. Ramesh Gautam – Academician  
Prof. Namvar Singh – Author  
Prof. Gopeshwar Singh – Author  
Ravikant – Activist and Author  
Devendra Chaubey – J.N.U.  
Rajendra Gautam – D.U.



## 25. Seminars/ Conferences/Workshops organized &amp; the source of funding

a) National

S. No.	Seminar/ Workshop	Source Of Fund
1.	Ramvilas Sharma Vivbidh Aayam	U.G.C.
2.	Nagarjun Vividh Ayam	U.G.C.
3.	Patrakarita Shabdawali	Cstt (Ministry Of Hrd)
4.	Social Media	Bharteeya Jan Sanchar Sangh
5.	Bhashayee Patrakarita	Bharteeya Jansanchar Sangh

b) International

Nil

## 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B.A. (Hons.) Hindi	Not available	53	38	15	53	60

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B.A. (Hons.) Hindi	39	14	0

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

10 (Approx. per year)

## 29. Student progression

Student progression	Against % enrolled
UG to PG	25
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	NA
• Campus selection	
• Other than campus recruitment	
Entrepreneurship/Self-employment	NA



30. Details of Infrastructural facilities

j. Library

Library facilities are available for teachers and students of the department in the main library of the college.

k. Internet facilities for Staff & Students

Yes for staff as well as student

l. Class rooms with ICT facility

So many classrooms are available with ICT facilities.

m. Laboratories

NA (Not required by the Department)

31. Number of students receiving financial assistance from college, university, government or other agencies

25 students

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Patrakarita Shabdawali: Prayog Aur Samasyaen

Vaishvikaran Ke Daur Me Hindi

Paid News

Gadya Lekhan Kala (Upanyas Ke Sandarbh Men)

Nagarjun: Vividh Aayam

Ramvilash Sharma Aur Vishnu Prabhakar : Vividh Aayam

Cinema Aur Rangmanch Ke Sambandh

Hindi Katha Sahitya Evam Hindi Kavita

Bharteeya Bhasha Patrakarita Shikshan

Bhasha Ke Samajik Sandarbh

Hindi Bhasha Aur Media

Hindi Kavita Aur Hindi Kahani

33. Teaching methods adopted to improve student learning

Our teachers try to use modern and technical devices to deliver class-room lectures.



We organize educational trips for the students to make their class-room learnings more practical.

We organize programs to improve the sense of social and national responsibilities in the students.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Participation in many programs related to environment, education, social cause and awareness

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

Availability of experienced and young teachers

We have a very good literary society (Hindi Sahitya Parishad) which organizes many activities like seminars, conferences, educational trips and class-room lectures by external experts etc.

Legacy of well-known scholars as ex-faculty members like Dr. Satyendra Taneja, Indranath Choudhary, Girish Bakshi, Mahender Sharma & Prabhat Kumar

#### **Weaknesses:**

We are still facing the problem of placement for the students of our department and trying our level best to improve it.

#### **Opportunities:**

We are trying to improve our performance by making our students eligible and efficient for the global market as the market of Hindi is expanding.

#### **Challenges:**

To prepare students according to the changing world and academic needs as well as the trend and situation of the market.

#### **Future Plans:**

We are trying to establish a language lab as well as a media lab for the students of Hindi

We are in the process of starting B.A. (H)-Hindi Journalism.



## EVALUATIVE REPORT OF THE DEPARTMENT OF HISTORY

1. Name of the department: Department of History
2. Year of Establishment: 1948
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)  
UG  
  
PG
4. Names of Interdisciplinary courses and the departments/units involved  
Environmental Issues in India; Delhi, Medieval; Issues in Contemporary World
5. Annual/ semester/choice based credit system (programme wise)  
Semester and CBCS.
6. Participation of the department in the courses offered by other departments  
N/A
7. Courses in collaboration with other universities, industries, foreign institutions, etc.  
N/A
8. Details of courses/programmes discontinued (if any) with reasons  
N/A

### 9. Number of Teaching posts: 7

	Sanctioned	Filled
Professors		
Associate Professors	7	2
Asst. Professors		5

### 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sharmila Shrivastava	M.Phil, Ph.D	Associate Professor	Modern Indian History	Approx 25 years	None
Dr. Monmayee Basu	Ph.D	Associate Professor	Modern Indian History	Approx 19 years	None
Yogender Dayma	MA, M.Phil- Pursuing Ph.D	Assistant Professor	Ancient Indian History	approx 10 years	None
Justin Mathew	MA, M.Phil- Pursuing Ph.D	Assistant Professor	Modern Indian History	approx 7 years	None
Amit Kumar	MA, M.Phil	Assistant Professor	Modern Indian History	Approx 2 years	None
Santosh Hasnu	MA, M.Phil	Assistant Professor	Medieval Indian History	Approx 2 ½ years	None
2 Guest Faculties					

**11. List of senior visiting faculty**

N/A

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.**

Approximately 50%

**13. Student -Teacher Ratio (programme wise)**

22:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

N/A

**15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ M.Phil / PG.**

Ph.D & M.Phil.

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

N/A

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received**

N/A

**18. Research Centre /facility recognized by the University**

N/A

**19. Publications:**

- a) Publication per faculty – 5 total
- b) Number of papers published in peer reviewed journals (national/ international) by faculty and students – 3
- c) Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database- International Social Sciences Directory, EBSCO host, etc.)
- d) Monographs
- e) Chapter in Books – 2
- f) Books Edited
- g) Books with ISBN/ISSN numbers with details of publishers –
- h) ISBN No. – 978-93-801-02-6; ISBN 978-93-5098-064-4; , ISSN-00129976; ISSN – 0012-9976; ISSN-0975-4962

**20. Areas of consultancy and income generated**

N/A

**21. Faculty as members in**

- a) National committees b) International Committees c) Editorial Boards

N/A.





## 22. Student projects

Percentage of students who have done in-house projects including inter departmental/ programme

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

## 23. Awards / Recognitions received by faculty and students

2015 BA History Honors University Topper – Abhinav Sharma

## 24. List of eminent academicians and scientists / visitors to the department

Dr. Amar Farooqui, Professor, Department of History, University of Delhi (2015)

Dr. Raziuddin Aquil, Associate Professor, Department of History, University of Delhi (2014)

Dr. David. V. Zou, Assistant Professor, Department of History, University of Delhi (2014)

Dr. Madhu Kishwar, Centre for the Study of Developing Societies, Delhi (2013)

Dr. Arvind Sinha, Professor, Dept of History, Jawaharlal University, New Delhi (2012)

## 25. Seminars/ Conferences/Workshops organized & the source of funding

a) National - Nil

b) International - Nil

## 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B A History Hons	Not available	65	43	22	65	57.69231

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from abroad
B A Hons	40%	60%	1%
B A Programme	30%	70%	

Generic Elective – 40% - 60%

IDCC - 40% - 60%

DCC - 40% - 60%



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?  
NET-JRF - 40

29. Student progression

Around 20 Students go for Masters Programme

Around 3-4 Students go for Law Studies

Other Students go for Competitive Exams

30. Details of Infrastructural facilities

- a) Library
- b) Internet facilities for Staff & Students
- c) Class rooms with ICT facility
- d) Laboratories

31. Number of students receiving financial assistance from college, university, government or other agencies  
N/A

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

We organize seminars and talks in which we invite scholars and experts from University of Delhi and also from other Universities like JNU.

We organize heritage walks and sensitize our students with important historical buildings, monuments and make them aware of the importance of conservation and preservation.

Moreover, we organize a departmental History festival in which talks are organized, Quiz contests on historical topics are arranged and historical films are screened.

33. Teaching methods adopted to improve student learning

Class room teaching and also interaction with students on several topics of the syllabus in tutorial classes are conducted.

PowerPoint presentations are given on special topics.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Heritage Walks; Visits to National Museum and National Art Gallery; Trips to historical places in Delhi and outside; Screening of Films related to history

35. SWOC analysis of the department and Future plan

**Strengths:**

We have a learned faculty of highly accomplished and qualified teachers who have specialized in different areas of interest and has a plethora of publications to their credit.



Our students attain top positions in the University almost every year. Special mention may be given to Abhinav Sharma who holds the top rank in the University this year.

### **Weaknesses:**

Being a Government College, it comes across an unfortunate crunch of funds forcing it to face the issue of not having enough projector rooms.

### **Opportunities:**

There are a plenty of opportunities for students after studying history. Many of them opt for Civil services, legal professions and academic positions in colleges and Universities both in India and Abroad.

### **Challenges:**

History department offers a lot of opportunities to do extensive research in different fields of history. They attend conferences both in India and abroad and also contribute immensely to intellectual studies in different branches of historical research.

### **Future Plans:**

The objective is to establish the history department at par with top international universities. We intend to organize national and international conferences and invite eminent scholars. We propose to start an exclusive student centered history magazine/journal; & to collaborate with institutions like Indian National Trust for Art and Cultural Heritage (INTACH), Aga Khan Trust for Culture for issues of conservation and preservation of cultural heritage.



## EVALUATIVE REPORT OF THE DEPARTMENT OF MATHEMATICS

1. **Name of the department:** Department of Mathematics
2. **Year of Establishment:** 1948
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

B. Sc. (Honors) Mathematics  
 M. Sc. (Mathematics)  
 M. Sc. (Operations Research)

4. **Names of Interdisciplinary courses and the departments/units involved**

S. No.	Name of Course	Departments involved
1.	B. Sc. (Physical Sciences)	Mathematics, Physics, Chemistry
2.	B. Sc. (Applied Physical Sciences)	Mathematics, Physics, Computer Science

5. **Annual/ semester/choice based credit system (programme wise)**

S. No.	Name of the course	System (Annual/Semester/CBCS)
1.	B.Sc.(H) Mathematics I year	CBCS
2.	B. Sc.(H) Mathematics II year	Semester
3.	B. Sc.(H) Mathematics III year	Semester (Erstwhile FYUP)
4.	M. Sc. (Mathematics)	Semester
5.	M. Sc. (Operations Research)	Semester

6. **Participation of the department in the courses offered by other departments**

In current session:

S. No.	Name of Paper	Course and Department
1.	Calculus	All Honors courses other than B. Sc. (H) Mathematics (Semester I)
2.	Linear Algebra	-do- (Semester II)
3.	MACT 302 (Mathematics II)	B. Sc. (H) Chemistry Sem III, Department of Chemistry
4.	MAHT 305 (Mathematics II)	B. Sc. (H) Electronics Sem III, Department of Physics and Electronics
5.	GEHT 404 (Probability and Statistics)	B. Sc. (H) Geology Sem IV, Department of Geology
6.	PHHT 310 (Mathematics I)	B. Sc. (h) Physics Sem III, Dept of Physics
7.	PHHT 413 (mathematics II-analysis and statistics)	B. Sc. (h) Physics Sem IV, Dept of Physics
8.	MACT 303 (Mathematics and Statistics)	B. Sc. (H) Botany Semester III, Department of Botany
9.	MACT 303 (Mathematics and Statistics)	B. Sc. (H) Zoology Semester III, Department of Zoology
10.	Mathematical Awareness	B. A. (H) Economics Semester III, Dept of Economics
11.	Numerical Methods	B. Tech (Electronics) Semester V, Department of Electronics



## Courses in Past four years

S.No.	Name of Paper	Course and Department
1	Calculus, Algebra	To Semester I of all honors courses except B. Sc. (H) Mathematics (Erstwhile FYUP)
2	Analysis, Differential Equations	To Semester II of all honors courses except B. Sc. (H) Mathematics (Erstwhile FYUP)
3	Linear Algebra	B. A. (H) Economics Semester VI, Department of Economics
4	Real Analysis	To semester III of all B. Sc. (Erstwhile FYUP) courses
5	Linear Algebra	To semester IV of all B. Sc. (Erstwhile FYUP) courses
6	MACT 101 (Mathematics I)	B. Sc. (H) Chemistry Semester I, Dept of Chemistry
7	MAHT 204 (Mathematics I)	B. Sc. (H) Electronics Semester II, Dept of Electronics

## 7. Courses in collaboration with other universities, industries, foreign institutions, etc.

N/A

## 8. Details of courses/programmes discontinued (if any) with reasons

Nil

## 9. Number of Teaching posts

	Sanctioned	Filled*	Nature of Post
<b>Professor</b>			
<b>Associate Professor</b>	17	5	Permanent
<b>Assistant Professor</b>		9	5 permanent +4 adhoc

\* Against 2 posts, 4 guest teachers are working.

## 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./ M. Phil. etc.)

Name	Qualification	Designation	Specialization	No of years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Neelam Malhotra	M.A., M. Phil, Ph. D.	Associate Professor	Optimization Techniques	32 years	NIL
Dr. Harjeet Arora	M. Sc., Ph. D.	Associate Professor	Operations Research and Management Science	30 years	NIL
Dr. Preeti Dharmarha	M. Sc., M. Phil., Ph. D.	Associate Professor	Functional Analysis and Operator Theory	28 years	NIL
Dr. Deepa Thirwani	M. Sc., Ph. D.	Associate Professor	Optimization Techniques	25 years	NIL
Ms. Amita Aggarwal	M. Sc., M. Phil.	Associate Professor	Operator Theory	19 years	NIL



Dr. Jyoti Bhola	M.A, M.Phil, Ph.D	Assistant Professor	Functional Analysis and Operator Theory	9 years	NIL
Mr. Rakesh Batra	M. Sc., M. Phil.	Assistant Professor	Functional Analysis and Topology	11 years	NIL
Dr. Mukund Madhav Mishra	M. Sc., Ph. D.	Assistant Professor	Harmonic Analysis	4 years	2
Ms. Kriti Wadhwa	M. Sc., M. Phil.	Assistant Professor	Optimization Techniques	6.5 years	NIL
Dr. Arvind	M. Sc., M. Phil., Ph. D.	Assistant Professor	Cryptography	11 years	1
Dr. Sundar Lal	M. Sc., Ph. D.	Assistant Professor	Graph Theory	8 years	NIL
Mr. Brij Mohan	M. Sc., M. Tech.	Assistant Professor	Computer Applications in Mathematics	6 years	NIL
Mr. Sandeep Kumar	M. Sc., M. Phil.	Assistant Professor	Operations Research	5 years	NIL
Ms. Saloni Gupta	M. Sc., M. Phil.	Assistant Professor	Algebra	4 years	NIL

#### 11. List of senior visiting faculty

N/A

#### 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

30%

#### 13. Student -Teacher Ratio (programme wise)

25:1

#### 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Two

#### 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.

PG—14

M. Phil—11

M.Tech—1

Ph.D—8



Name	Qualification
Dr. Neelam Malhotra	M.A., M. Phil, Ph. D.
Dr. Harjeet Arora	M. Sc., M. Phil, Ph. D.
Dr. Preeti Dharmarha	M. Sc., M. Phil., Ph. D.
Dr. Deepa Thirwani	M. Sc., M. Phil., Ph. D.
Ms. Amita Aggarwal	M. Sc., M. Phil.
Dr. Jyoti Bhola	M. A., M. Phil., Ph. D.
Mr. Rakesh Batra	M. Sc., M. Phil.
Dr. Mukund Madhav Mishra	M. Sc., Ph. D.
Ms. Kriti Wadhwa	M. Sc., M. Phil.
Dr. Arvind	M. Sc., M. Phil., Ph. D.
Dr. Sundar Lal	M. Sc., Ph. D.
Mr. Brij Mohan	M. Sc., M. Tech.
Mr. Sandeep	M. Sc., M. Phil.
Ms. Saloni Gupta	M. Sc., M. Phil.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

a) National :One

b) International funding: Nil

Completed Projects: Two National Projects

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Nil

18. Research Centre /facility recognized by the University

Nil

19. Publications:

Total (Till date)

S. No.	Item	Total
1	Number of papers published in International Journals	41
2	No. of papers published in National Journals	10
3	Papers presented in Conferences	9
4	Books (Edited/Reviewed/Chapters)	5
5	Invited Talks	6





Total during 2011-2015

S. No.	Item	Total
1	Number of papers published in International Journals	18
2	No. of papers published in National Journals	0
3	Conferences/Workshops/Seminars attended	27
4	Books (Edited/Reviewed/Chapters)	4
5	Invited Talks	3

## 20. Areas of consultancy and income generated

N/A

## 21. Faculty as members in

- a) National committees NIL
- b) International Committees NIL
- c) Editorial Boards One

## 22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

Nil

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Data not available

## 23. Awards / Recognitions received by faculty and students

a) Faculty: NIL

b) Students:

Session	Special Academic Prizes	University Positions	Gold Medals	Sports	Extra Curricular Activities
2014-15	11	5	1	2	8
2013-14	15	6	2	4	8
2012-13	12	6	--	3	8
2011-12	11	6	2	3	8



## 24. List of eminent academicians and scientists / visitors to the department

S. No	Session	Name	Affiliation
1	2011-12	Dr. Shanta Laishram	Indian Statistical Institute, Delhi
2	2012-13	Prof. Gadadhar Mishra	IISc Bangalore
3	2012-13	Prof. ManinDr.a Agrawal	IIT Kanpur
4	2012-13	Prof. Alok Dey	Indian Statistical Institute, Delhi
5	2012-13	Prof. Kapil H Paranjape	IISER Mohali
6	2012-13	Prof. Amber Habib	Shiva Nadar University, Noida
7	2013-14	Prof. Sudeshna Basu	George Washington University, Washington DC
8	2013-14	Prof. Kalyan B. Sinha	Jawahar Lal Nehru Centre of Advanced Sciences, Bangalore
9.	2013-14	Prof. Sundaram Thangavelu	IISc, Bangalore
10.	2013-14	Prof. Kapil Paranjape	IISER Mohali
11.	2013-14	Dr. Sameer Chavan	IIT Kanpur
12	2013-14	Dr. Ved Prakash Gupta	JNU, Delhi
13.	2013-14	Prof. J. K. Verma	IIT Bombay
14.	2013-14	Dr. Surjeet Kaur	IIT Gandhinagar
15.	2013-14	Dr. Mahender Singh	IISER Mohali
16.	2013-14	Dr. Priyabrat Deshpande	Chennai Mathematical Institute
17.	2014-15	Dr. Shobha Bagai	Cluster Innovation Centre, University of Delhi

## 25. Seminars/ Conferences/Workshops organized &amp; the source of funding

S. No.	Name of Event	Funding Agency
1.	Science Academies Lecture Workshop, 2012-13	Indian National Science Academy, National Academy of Sciences and Indian Academy of Sciences
2.	National Workshop on Advances in Mathematics, 2013-14	National Board for Higher Mathematics

## 26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Enrolled			Pass percentage
			*M	*F	Total	
B. Sc. (Honors) Mathematics	Not available	68	45	23	68	100

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	Students from the same state	Students from other States	Students from Abroad
B. Sc.(Honors) Mathematics	20	47	1



### 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

Many of our students clear the above mentioned examinations. Since most of them appear in these examinations at least 2 years after completing their graduation and in the absence of any formal mechanism to collect such data we have to depend upon the information provided later and according to that feedback percentage of such students is approximately 12%.

### 29. Student progression

Student Progression	% against enrolled
UG to PG	App 75%
PG to M.Phil./ Ph.D.	App 10%
Employment	App 60%

No formal mechanism has been set up to collect this information.

### 30. Details of Infrastructural facilities

#### n. Library

Session	No. of Books Purchased	Amount Spent to Purchase Books (in Rupees)
2011-12	165	84,367/-
2012-13	174	65,838/-
2013-14	87	68,714/-
2014-15	100	91,211/-

#### o. Facilities like Internet/Wi-Fi, Computer Labs, ICT, Laptops are available for students.

For details of these facilities, Please refer to Criterion IV.

### 31. Number of students receiving financial assistance from college, university, government or other agencies

Please refer to Criterion V.

Session	No. of students who received Scholarships from College*
2014-15	6
2013-14	2
2012-13	3
2011-12	5

\* For other scholarships from govt. agencies and the total amount: Please refer to Criteria V

### 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- (i) Lecture on "Grimm Conjecture and Riemann Hypothesis" by Dr. Shanta Laishram, Indian Statistical Institute, Delhi (2011-12).
- (ii) Lecture on "From zero to infinity" by Prof Amber Habib, Shiv Nadar :University, Noida (2012-1



- (iii) Lecture on “Mathematics and Politics” by Dr. Sudeshna Basu, George: Washiongton University, Washington DC (2013-14)
- (iv) Lecture on “Mathematical Modeling” by Dr. Shobha Bagai :Cluster Innovation Centre, University of Delhi.(2014-15)
- (v) Seminar on “symmetries in Mathematics” by Prof. Kalyan B. Sinha,: Jawahar Lal Nehru Centre of Advanced Sciences, Bangalore (2013-14)
- (vi) Science Academies Lecture Workshop, 2012-13, Speakers:
  - “Differentiation” by Prof Gadadhar Mishra, IISc Bangalore,
  - “The PNP problem” by Prof ManinDr.a Agrawal, IIT Kanpur,
  - “Variance and Existence of Orthogonal Arrays” by Prof Alok Dey, Indian Statistical Institute, Delhi,
  - “Non-Euclidean Geometry” by Prof Kapil H Paranjape, IISER Mohali.
- (vii) National Conference on Advances in Mathematics, March 7-8,2014.

### 33. Teaching methods adopted to improve student learning

The teachers use ICT methods like PPT with inputs from advanced Mathematical Software in regular teaching.

The students are also asked to prepare presentations on assigned topics which helps them improve the understanding of topics as well as build self confidence.

Regular tutorials are conducted for the peer support of students. Special care is taken in forming tutorial groups so that the groups are never too large and are heterogeneous in nature.

Self-evaluation exercises are given to students regularly in form of assignments.

Students’ assignments are designed in a way that it takes care of the broad nature of the curriculum beyond the prescribed text books.

The department owns its own website at URL [www.Mathematicshrc.in](http://www.Mathematicshrc.in). From notices to useful resources, the web page has a lot to offer to students. Students have option to download various e-notes and study material from the departmental website and get updated about events like conferences and seminars across the nation. The website also hosts a departmental blog where faculties interact with students over different topics.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The students and teachers take part in ISR and extension activities as active members of the following college level committees:

*Haritima*: The Environment awareness society NCC/NSS

*Enactus* (Entrepreneurship and Social Causes)



SPIC MACAY (Promoting Indian Arts and Culture) Refer to criteria 6 and 7 for the details.

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

The department of Mathematics, Hansraj College founded by renowned Mathematician Shri Shanti Narayan with pillars as Dr. I. K. Malhotra, Dr. N. M. Kapoor, Dr. M. C. Puri, Dr. S. R. Arora, Prof. S. C. Arora, Dr. K. L. Batla, Dr. Harbans Lal, Dr. Satpal and Dr. J. P. Pruthi is presently having faculty members with diverse areas of expertise which includes major branches of both pure and applied Mathematics. This is why the department is counted as one of the best Mathematics departments in the University of Delhi. While the department has senior faculty members having experience in teaching and research for more than 30 years, it is also blessed with young enthusiastic brains to carry over the 67 year old legacy. Teachers, along with students form a good team and provide a productive environment for teaching and learning of Mathematics in the college. The department has a precedent of supporting all sorts of academic activities and working as a team towards that. Not only the regular faculty members but retired members also participate in the activities and motivate younger members of the department and the students.

#### **Weaknesses:**

The department undergoes a regular introspection to work out the shortcomings and meet the expectations of students and the college. One of the weaknesses the department is having currently is the growing fraction of guest faculties involved in teaching of the regular courses. The department also feels that use of ICT in teaching-learning must be enhanced and department should be looking for different dimensions of use of technology in Mathematics teaching.

#### **Opportunities:**

The department of Mathematics observes a bright scope of evolving as a centre of excellence for Mathematics teaching and interdisciplinary research involving real life applications and industrial collaborations. Mathematics, being central to different sciences branches as well as commerce and economics is looked upon as an instrumental tool by various research centres and industries. Therefore, the department sees a vast sea of opportunities in the form of interdisciplinary collaboration within the college and with research centres and industries across India and abroad.

#### **Challenges:**

One of the major challenges before the department is the diversity of students. They come from different economic and social backgrounds, different geographic, demographic and dialect zones. Each student needs to cater to as per his/her capabilities and limitations. Moreover, the students come with different goals in minds and incorporating requirements for all of them in from of a single course is really challenging. It is also felt that departments cannot continue to rely on the grants received by the government agencies and we must devise ways to earn revenue on our own. This may include collaboration with industries and taking up sponsored research projects.



### **Future Plans:**

Department in its endeavor towards an effective education has certain objectives and an action plan ready for academic as well as personality development of the students. In this direction a series of activities and programs that are in different stages of their organization is being given consideration for the current academic year and the department plans to continue with those activities that has served their purpose and got a popular response.

#### Academic Activities

##### Workshops and Lectures

Presentation of latest development and research in emerging areas of mathematics and related disciplines like information technology and operational research by eminent personalities known for perfection in their work. Information security, financial and business mathematics, portfolio management, actuarial sciences are some of these areas.

In house special lecture cum lab sessions by the teachers of our department on many important topics outside the scope of usual syllabi like software training in Office, MATLAB, C/C++, latex, Mathematica, Maxima, SPSS etc.

Career counseling by teachers in the field of mathematics

Discussion and debate among students.

Collaboration with industries and other Institutions at both student and faculty levels.

Activities already done in recent past:

Workshops on "How to create blog and websites" by Brij Mohan , HRC, DU.

Workshop on "How to create good CV for jobs and entrepreneurship" by TIME, Delhi.



## EVALUATIVE REPORT OF THE DEPARTMENT OF PHILOSOPHY

1. Name of the department: Department of Philosophy

2. Year of Establishment: 1948

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Undergraduate courses

4. Names of Interdisciplinary courses and the departments/units involved

Introduction to Philosophy.

Ethics in Public Domain.

Formal Logic.

5. Annual/ semester/choice based credit system (programme wise)

Semester and Choice Based Credit System.

6. Participation of the department in the courses offered by other departments

Department of Hindi: Hindi A, B and C.

Department of English: English A and B.

Department of History:

History of India: 300 B.C. to 300 A.D.

History of India: 8<sup>th</sup> to 18<sup>th</sup> Century

Department of Economics: Macro-economics.

Department of Sanskrit: Sanskrit Poetry, Sanskrit Grammar.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

8. Details of courses/programmes discontinued (if any) with reasons

Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors	-	-
Associate Professors	04	-
Assistant Professors		02-Permanent. 01-Temporary.





10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No of years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Bhanu Bhupendra Sharma	M.Phil, Ph.D.	Assistant Professor	Ethics, Indian Philosophy. Philosophy of Bhagvat Gita	10	
Dr. Aamir Riyaz	M.Phil, Ph.D.	Assistant Professor	Philosophy of Religion, Logic, Contemporary, Indian Philosophy (Gandhi, Ambedkar and Iqbal), Wittgenstein.	08	
Dr. Satyendra Srivastava	M.Phil, Ph.D.	Assistant Professor	Existentialism, Philosophy of Gandhi and Vivekananda, Ethics, Logic	08	

11. List of senior visiting faculty

None

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

30% lectures and tutorials for B.A. (Programme) were delivered by temporary faculty from December 2010 till date.

13. Student -Teacher Ratio (programme wise)

B. A. (Programme): 30:1

B.A. (Hons.): 40:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Not Applicable

15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ M.Phil / PG.

Name	Qualification
Dr. Bhanu Bhupendra Sharma	M.Phil, Ph.D.
Dr. Aamir Riyaz	M.Phil, Ph.D.
Dr. Satyendra Srivastava	M.Phil, Ph.D.



16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Not Applicable

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

None

18. Research Centre /facility recognized by the University

None

19. Publications:

a) Dr. Aamir Riyaz Published Nine Papers:

Research paper entitled, "*Wittgenstein's concept of Religious Belief and Language-Games*" has been published in IJMER, ISSN: 2277-7881, Volume 2, Issue 12 (1), November, 2013, Page No. 17-34.

Research paper entitled, "*A Critical Exposition of Iqbal's Philosophy of 'The Self'*", has been published in Drashta research journal (ISSN: 2277-2480), Year 2, Issue 8, September 2013-November, 2013, Page No. 21-26.

Research paper entitled, "*Gandhian Philosophy of Means and End*" has been published in IJMER, ISSN: 2277-7881, Volume 2

-October, 2013, Page No. 60-67.

Research paper entitled, "*Prophet Mohammad (s.a.w.) in*, Issue 13 (2), December, 2013, Page No. 249-256.

Research paper entitled, "*The Concept of Universe in Iqbal's Philosophy*" has been published in Sucharitha ISSN: 2319-4235, Volume 1, Issue 3, August *Indian Philosophy*" has been published in 'Darshan' International Journal of Philosophy and Yoga, Year 1, Issue: 3-4, July-Sept. & Oct.-Dec. 2013, (ISSN: 2320-8325), page No. 48-53.

Research paper entitled, "*Mohammad Iqbal's Concept of God*" has been published in the Anushilana, Research Journal of Indian Culture, Social and Philosophical Stream, Vol. LI, Year: 9, 2013, ISSN: 0973-8762, Page No. 7-12.

Research paper entitled, "Nature of Axioms", has been published in the Sucharitha, ISSN: 2319-4235, Vol. 3, Issue 1, January 2015, Page No. 35-46.

Research paper entitled, "*The Quran and Science: Origin and Formation of the Universe.*" has been published in the Anushilana, Research Journal of Indian Culture, Social and Philosophical Stream, Vol. LXI, Year: 11, 2015, ISSN: 0973-8762, Page No. 221-229.

Research paper entitled, "The Concept of God in Gandhian Philosophy" has been



published in 'Darshan' International Journal of Philosophy and Yoga, Year 3, Issue: 9-10, June 2015, (ISSN: 2320-8325), page No. 33-37.

b) Three Papers have been Published by Dr. Satyendra Srivastava:

Contemporary Philosophy, "The Notion of Bad Faith in Sartre's Existential Philosophy: An Analysis" (Chapter), ISBN: 9789383754359, Year, 2015, Page No. 5-23.

"Sartre's Concept of Freedom", ISSN: 09740066, Year 2014, in Madhya Bharti.

"The Notion of Human Freedom in Sartre and J. Krishnamurty's Philosophy", Year 2012, in Kadambini, Page: 62-63.

### 20. Areas of consultancy and income generated

None

### 21. Faculty as members in

- a) National Committees: Nil
- b) International Committees: Nil
- c) Editorial Boards:

Dr. Aamir Riyaz is the member of the three Editorial Board:

- Member of the Review and Advisory Board of IJMER (International Journal of Multidisciplinary Educational Research), Since 2014, ISSN: 2277-7881.
- Member of the Review and Advisory Board of Sucharitha: Journal of Philosophy and Religion, from 1<sup>st</sup> Feb., 2014, ISSN: 2319-4235.
- Member of the Editorial Board of 'Darshan' International Journal of Philosophy ISSN: 2320-8325, from July, 2015.

### 22. Student projects

Percentage of students who have done in-house projects including inter departmental/programme

30%

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

None

### 23. Awards / Recognitions received by faculty and students

Dr. Aamir Riyaz, in 2015, was awarded **MAA BHARTI SAMMAN** by Swadesh Hindu Ekta Manch, for his contribution in religious and cultural fields.



#### 24. List of eminent academicians and scientists / visitors to the department

We have invited eminent scholars like Prof. H. S. Prasad, Head, Dept. of Philosophy, University of Delhi and Prof. Bindu Puri, Dept. of Philosophy, University of Delhi to deliver lectures on philosophical and social issues in our college. Students and teachers have learned a lot from these types academic activities. These lectures were thought provoking and prove very beneficial for research purpose also.

#### 25. Seminars/ Conferences/Workshops organized & the source of funding

d) National: N/A

e) International: N/A.

#### 26. Student profile programme/course wise:

Not applicable

#### 27. Diversity of Students

Not applicable

#### 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc?

Not applicable

#### 29. Student progression

Student progression	Against % enrolled
UG to PG	30%
PG to M.Phil.	10%
PG to Ph.D.	5%
Ph.D. to Post-Doctoral	Information not available
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	Information not available
Entrepreneurship/Self-employment	None

#### 30. Details of Infrastructural facilities

- p. Library: We have around 2000 books which covers almost all the areas of Philosophy.
- q. Internet facilities for Staff & Students: Available
- r. Class rooms with ICT facility: Not Available
- s. Laboratories: N/A



### 31. Number of students receiving financial assistance from college, university, government or other agencies

Not Available

### 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

We organized two student enrichment programmes:

Prof. H.S. Prasad, Head, Department of Philosophy, University of Delhi, delivered a lecture on Buddhist Ethics in Feb. 2014.

Prof. Bindu Puri, Department of Philosophy, University of Delhi, delivered a lecture on Gandhian Philosophy in Jan. 2014.

### 33. Teaching methods adopted to improve student learning

We use analytical and logical method and encourage students to participate in class discussion.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

We have conducted lectures on Secularism, Religious fundamentalism, the significance of non-violence in present violence centric world, moral values etc. which proved very helpful for better understanding of society.

### 35. SWOC analysis of the department and Future plan

#### **Strengths:**

Some of our faculty members are deeply involved in academic and social activities, who constantly write on important social and philosophical issues and their ideas are published in different magazines and newspapers.

#### **Weaknesses:**

We do not have B.A. Philosophy (Hons) course, which is a big lacuna for our department.

#### **Opportunities:**

We are working very hard to start Philosophy (Hons) in our institution. This subject is very useful to understand society and human nature in a comprehensive way. This subject enhances student's ability to think logically, morally and analytically.

#### **Challenges:**

The biggest challenge for Philosophy teachers are to prove the significance of humanity and human values in present consumerist and techno centric society. It is very sad to mention that present generation students do not show interests in subjects like Philosophy and Sociology, which are the foundations of a good society.



### **Future Plans:**

Our future plan is to start Philosophy (Hons) in our college. We shall try our best to restore student's faith in Philosophy, which has been called as 'mother of all sciences' by Greek philosopher Aristotle.



## EVALUATIVE REPORT OF THE DEPARTMENT OF PHYSICS & ELECTRONICS

1. **Name of the department:** PHYSICS & ELECTRONICS
2. **Year of Establishment:** Physics Division was established in 1948, Electronics Division was established in 1987
3. **Names of Programmes / Courses offered**
  - UG Programme: B.Sc. (Hons) Physics, B.Sc. (Hons) Electronics, B. Tech. Electronics
  - PG Programme: M.Sc. Physics
4. **Names of interdisciplinary courses and the departments/units involved**  
 The following are the courses which Physics and Electronics teach as per curriculum apart from courses mentioned in S.No. 3  
 B.Sc. Physical Sciences - Programme Course and departments involved are Chemistry, Computer Science, Mathematics, Linguistics i.e. English, Hindi, Sanskrit for MIL, Botany, Zoology, Chemistry for Environmental Studies)
5. **Annual/ semester/ choice based credit system (programme wise):**

• B.Sc. (Hons) Physics	Semester and Choice based credit system
• B.Sc. (Hons) Electronics	Semester and Choice based credit system
• B. Tech. Electronics	Semester
• B.Sc. (Hons) Chemistry	Semester
• B.Sc. (Hons) Computer Science	Semester and Choice based credit system
• B.Sc. (Hons) Geology	Semester and Choice based credit system
• B.Sc. Physical Sciences	Semester
• B.Sc. (Hons) Mathematics	Semester
6. **Participation of the department in the courses offered by other department:**  
 The following are the courses which Physics and Electronics teach as per curriculum apart from courses mentioned in S.No. 3
 

B.Sc. (Hons) Chemistry	Chemistry Department
B.Sc. (Hons) Computer Science	Computer Science Department
B.Sc. (Hons) Geology	Geology Department
B.Sc. (Hons) Mathematics	Mathematics Department
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/ programmes discontinued (if any) with reasons:**

• B.Sc. (Hons) Physics (Annual Mode)	University Education Policy
• B.Sc. (Hons) Electronics (Annual Mode)	University Education Policy
• B.Sc. Applied Physical Sciences	University Education Policy





## 9. Number of Teaching Posts

	Sanctioned	Filled
Professors	NA	NA
Associate Professors		03
Asst. Professors		9+11(adhoc)

## 10. Faculty profile with name, qualification, designation, specialization

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Mamta Saini	Ph. D.	Associate Professor	Optoelectronics	27.5	NIL
Sh. P K Singh	M.Sc., M. Phil.	Associate Professor	Semiconductor Physics	27.5	NIL
Dr. Mona Bhatnagar	Ph. D.	Associate Professor	Photovoltaics	26.5	NIL
Dr. Amit Sehgal	M.Sc., Ph. D.	Assistant Professor	Microelectronics and VLSI	10.5	NIL
Sh. Sushil Kumar	M.Sc., M. Phil.	Assistant Professor	High Energy Physics	10	NIL
Sh. Pradeep Kumar	M.Sc., Ph. D. (Submitted)	Assistant Professor	DFT Calculations	10	NIL
Dr. Namrata Soni	M.Sc., Ph. D.	Assistant Professor	Condensed Matter Physics	10	NIL
Dr. Hema Chutani	M.Sc., Ph. D.	Assistant Professor	Molecular Physics	10	NIL
Dr. Maya Verma	M.Sc., Ph. D.	Assistant Professor	Material Science	7.5	NIL
Dr. Chetana Jain	M.Sc., Ph. D.	Assistant Professor	Electronics and Astrophysics	9	NIL
D. Srikala	M. Sc.	Assistant Professor	Physics	3.5 + 2 (on leave)	NIL
Ms. Bhavna Vidhani	M.Sc., M. Tech.	Assistant Professor	Optics	9	NIL
Dr. Kopal Aggarwal	M.Sc., Ph. D.	Assistant Professor (Temporary)	Non linear dynamics, Time series analysis	7.5	NIL
Dr. Tanuj Dhawan	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Material Science	7	NIL
Dr. Sukhbinder Singh Rait	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Photovoltaics	6	NIL
Dr. Rajan Walia	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Experimental Condensed Matter Physics	3	NIL
Dr. Shivani Agarwal	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Material Science	4.5	NIL
Dr. Ravikant Prasad	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Solid State Physics	4.5	NIL
Dr. Dibyajyoti Das	M. Sc.	Assistant Professor (Adhoc)	Optical Tweezers, Femtosecond Lasers	3	NIL
Sh. Chhtrapal	M.Sc., M. Tech.	Assistant Professor (Adhoc)	Solid State Physics	3	NIL
Dr. Berender Singh	M.Sc., Ph. D.	Assistant Professor (Adhoc)	Material Science	1	NIL
Ms. Shagun Nagpal	M.Sc.	Assistant Professor (Adhoc)	Solid State Physics	2	NIL
Ms. Swati Gupta	M.Sc.	Assistant Professor (Adhoc)	Electronics	7	NIL

**11. List of senior visiting faculty:**

- Dr. Ashok Kumar- Ramjas College, University of Delhi
- Sh. N K Sehgal- Hansraj College, University of Delhi (Retired Faculty)
- Dr. R M Bansal- Hansraj College, University of Delhi (Retired Faculty)
- Dr. Ashok Goyal- Hansraj College, University of Delhi (Retired Faculty)
- Dr. Anurag Mishra- Deen Dayal Upadhyay College, University of Delhi
- Dr. Anshu Rastogi- Zakhir Husain College, University of Delhi
- Dr. Poonam Bedi- SGTB Khalsa College, University of Delhi

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

- Work load of temporary faculty is equivalent to Assistant Professor Workload.
- Workload of visiting faculty accounts for 4-5 classes/week.

**13. Student teacher ratio (Programme wise): 27:1****14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: 22****15. Qualification of teaching faculty with D.Sc/ D. Lit./ Ph.D/ M.Phil/ PG: Mentioned in S. No. 10****16. Number of faculty with ongoing projects from a.) National b) International funding agencies and grants received: Nil****17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received.****Research Council, University of Delhi funded projects**

1. Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb (7 Lakhs)
2. Designing and optimization of auto-tracking solar energy based energy conversion module for rechargeable appliances (3.5 Lakhs)
3. Understanding the physical and geometrical behavior of differential equations and its applicability to the real world (3.5 Lakhs)
4. Masses of Charmonium States in Isospin Asymmetric Strange Hadronic Matter and their implications in Heavy Ion Collision Experiments. (5 Lakhs, Status: Approved)
5. Development of Visible light Activated Photocatalyst for Water treatment. (5 Lakhs, Status: Approved)
6. Emergency Management Solutions: Design of Solar based Eco-Friendly, Efficient, and Portable Lighting/Power, Water Conditioning and Thermoelectric Solutions (5 Lakhs, Status: Approved)

**18. Research Centre/ facility recognized by the University: The details are listed in Criterion 2**



## 19. Publications:

Mamta (Chowdhury) Saini

- M Saini, V L Gupta & E K Sharma, *Microwave & Optical Tech. Lett.* 8 75 (1995)
- M Saini, E K Sharma & M P Singh, *Optics Lett.* 20, 365 (1995)
- M Saini & E K Sharma, *Optics Lett.* 20, 2081 (1995)
- M Saini & E K Sharma, *IEEE Photonics Technology Lett.* 8, 384 (1996)
- M Saini & E K. Sharma, *IEEE J. Quantum Electronics* 32, 1383 (1996)
- S Srivastava, N Gupta, M Saini & E K Sharma, *J. Optical Comm.* 18, 5 (1997)
- M Chowdhury & E K. Sharma, *Proceedings of National Symposium on Recent Advances in Microwaves*, New Delhi India, Mar 2-3, 1993
- E K. Sharma, M Saini and M. P. Singh *Proceedings of 4<sup>th</sup> International Symposium on Recent Advances in Microwave Technology*, New Delhi-Agra, India, Dec 15-18, 1993.
- M Saini, V. L. Gupta and E K. Sharma, *Proceedings of 4<sup>th</sup> International Symposium on Recent Advances in Microwave Technology*, New Delhi-Agra, India, Dec 15-18, 1993.
- S Srivastava, N Gupta, M Saini, and E K. Sharma, *Proceedings of 1994 Asia Pacific Microwave (APMC)*, Tokyo, Japan, Dec 6-9, 1994.
- M Saini, and E K. Sharma, *In Proc. of Optical and Opto-electronic Instrumentation*, Chandigarh, India, Mar 29-31, 1995.
- J. Lalitha, N Kumar, M Saini, S Srivastava and P Jolly, *International Conference on Physics Education*, New Delhi, Aug 21-26, 2005.

Mona Bhatnagar Publications

- P K Bhatnagar & M Bhatnagar, *Physica Status Solidi (A)*, 158(1) K9 (1996)
- M Bhatnagar & P K Bhatnagar, *J. Mat. Sci.*, 33 2179 (1998)
- J Kumar, A Verma, P K Pandey, P K Bhatnagar, P C Mathur, M Bhatnagar, W Liu & SH Tang, *Nano Brief Reports & Reviews (World Science Net)* 04 (01) 23 (2009)
- J Kumar, A Verma, P K Pandey, P K Bhatnagar, P C Mathur, M Bhatnagar, W Liu & SH Tang, *Int. J. of Nanosci.*, 08(04-05) (2009)
- P K Bhatnagar & M Bhatnagar, *Regional Workshop on Low Dimensional Semiconductor Structures, LDSS'95*, New Delhi, India Dec 18-20 1995
- M Bhatnagar, P Pathak & P K Bhatnagar, *3<sup>rd</sup> International Conference on Semiconductor Materials & Technology, ICSMT*, New Delhi, India Dec 16 – 21 1996
- M Bhatnagar & PK Bhatnagar – *Published in Book of Proceedings of 14<sup>th</sup> European Photovoltaic Solar Energy Conference & Exhibition*, Barcelona, Spain, Jun 30 – July 4, 1997

Amit Sehgal

- T Mangla, A Sehgal, M Saxena, S Haldar, M Gupta & R S Gupta, *J.Semicond. Tech. &Sci.*, 4(3), 228 (2004)
- A Sehgal, T Mangla, M Gupta & R S Gupta, *Solid State Electron.*, 49(3) 301 (2005)
- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *IEEE Trans. on Microwave Theory and Techniques*, 53(9) 2682 (2005)
- T Mangla, A Sehgal, M Saxena, S Haldar, M Gupta & R S Gupta, *J. Semicond. Tech. and Sci.*, 5(3) 159 (2005)



- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *Semicond. Sci. and Tech.*, 21(3) 370 (2006)
- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *Thin Solid Films*, 54(1-2) 55 (2006)
- S Chopra, A Sehgal & R S Gupta, *Int. J. of Electronics*, 9(5) 279 (2006)
- T Mangla, A Sehgal, M Gupta & R S Gupta, *Int. J. Microwave & Optical Technol.*, 1(1) 106 (2006)
- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *Int. J. Microwave & Optical Technol.*, 1(2) 411 (2006)
- T Mangla, A Sehgal, M Gupta & R S Gupta, *Semicond. Sci. & Technol.*, 21(10) 1609 (2006)
- T Mangla, A Sehgal, M Gupta & R S Gupta, *IEEE Trans. on Electron Dev.*, 54(1) 68 (2007)
- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *Thin Solid Films* 516(8) 2162 (2008)
- A Sehgal, T Mangla, S Chopra, M Gupta & R S Gupta, *J. Semicond. Tech. & Sci.*, 7(4) 289 (2007)
- A Sehgal, T Mangla, M Gupta & R. S. Gupta, *National Symposium on Advances in Microwaves and Lightwaves (NSMAL-2003)*, University of Delhi, South Campus, New Delhi, India, 13-14 October, 2003, pp. 116-119.
- A Sehgal, T Mangla, M Gupta & R. S. Gupta, *National Conference on Radio Science in India (INCURSI – 2003)*, 27-29 November, 2003, National Physical Laboratory (NPL), New Delhi, India, pp. 42.
- T Mangla, A Sehgal, M Gupta & R. S. Gupta, *National Conference on Radio Science in India (INCURSI-2003)*, 27-29 November, 2003, National Physical Laboratory (NPL), New Delhi, India, pp. 41.
- A Sehgal, T Mangla, M Gupta & R. S. Gupta, *Thin Film Transistor Technologies VII Symposium, 2004 Joint International Meeting of ECS*, 3-8 October, 2004, Honolulu, Hawaii.
- A Sehgal, T Mangla, S Chopra, M Gupta & R. S. Gupta, *Asia Pacific Microwave Conference (APMC-2004)*, 15–18 December, 2004 New Delhi, India, pp. 126-127.
- T Mangla, A Sehgal, M Gupta & R. S. Gupta, *Asia Pacific Microwave Conference (APMC-2004)*, 15–18 December, 2004, New Delhi, India, pp. 189-190.
- A Sehgal, T Mangla, S Chopra, M Gupta & R. S. Gupta, *3<sup>rd</sup> International Conference on Materials for Advanced Technologies, (ICMAT-2005)*, 3-8 July, 2005 Singapore, pp. 6-7.
- A Sehgal, T Mangla, S Chopra, M Gupta & R. S. Gupta, *10<sup>th</sup> International Symposium on Microwave and Optical Technologies (ISMOT-2005)*, 22-25 August, 2005, Fukuoka, Japan, pp. 410-413.
- A Sehgal, T Mangla, S Chopra, M Gupta & R. S. Gupta, *XIII International Workshop on Physics of Semiconductor Devices (IWPSD-2005)*, 13-17 December, 2005, National Physical Laboratory (NPL), New Delhi, India, pp. 1040-1044.
- T Mangla, A Sehgal, M Gupta & R. S. Gupta, *XIII International Workshop on Physics of Semiconductor Devices (IWPSD-2005)*, 13-17 December, 2005, National Physical Laboratory (NPL), New Delhi, India, pp. 1030-1034.
- R. S. Gupta, T Mangla, A Sehgal & M Gupta, *National Conference on Recent Advancements in Microwave Technique and Applications (Microwave-2006)*, 6-8 October, 2006, University of Rajasthan, Jaipur.



- A Sehgal, T Mangla, M Gupta & R. S. Gupta, *The 9<sup>th</sup> Asian Symposium on Information Display (ASID-2006)*, 8-12 October, 2006, Habitat World at Indian Habitat Centre, New Delhi, pp.400-403.
- A Sehgal, T Mangla, M Gupta, R. S. Gupta, *4<sup>th</sup> International Conference on Materials for Advanced Technologies, (ICMAT-2007)*, 1-6 July, 2007, Singapore, pp. 52.
- A Sehgal, R Gupta, M Gupta & R. S. Gupta, *12<sup>th</sup> International Symposium on Microwave and Optical Technologies (ISMOT-2009)*, 16-19 December, 2009, Delhi, India.

#### Sushil Kumar

1. V Kumar, S Kumar & B S Koranga, *Int. J. of Modern Phys. E*, 20(6) 1455 (2011)
2. S. Kumar, *Int. J. of Theoretical Phys.* 54 1644 (2015)
3. S Kumar, V Kumar & B S Koranga, *Int. J. of Modern Theoretical Phys*, 4(1) 41 (2015)
4. V. Kumar, Z. Hasan, B.S. Koranga, S Kumar, D. Negi and S. Kumar, *Proceedings of the DAE Symp. on Nucl. Phys.* 55 134-35 (2010)
5. V. Kumar, S. Kumar, Z. Hasan, D. Kumar, Pradeep, B. S. Koranga, S. Kumar & D. Negi *Proceedings of the DAE Symp. on Nucl. Phys.* 57 378-9 (2012).
6. S. Kumar, V. Kumar *Proceedings of the DAE Symp. on Nucl. Phys.* 59 258-9 (2014)

#### Pradeep Kumar

1. P Kumar, V Gulia & A G Vedeshwar. *J. Appl. Phys* 114(19) 193511 (2013)
2. P Kumar & A G Vedeshwar. *J. Phys. D: Appl. Phys.* 48(10) 105301 (2015)
3. P Kumar & A G Vedeshwar. *Materials Lett.* 157 318 (2015)
4. P Kumar & A G. Vedeshwar *International Conference On Recent Trends in Materials and Devices-2013*, Amity University, Noida.
5. P Kumar & A G. Vedeshwar *4<sup>th</sup> National Conference on Advanced Materials and Radiation Physics-2015*, Sant Longowal Institute of Engineering & Technology, Longowal, Punjab.

#### Namrata (Dewan) Soni

1. N Dewan, M Tomar, V Gupta & K Sreenivas, *Appl Phys Lett.*, 86, 223508 (2005)
2. N Dewan, K Sreenivas & V Gupta, *IEEE Electron Dev. Lett.* 27(9) 752 (2006)
3. N Dewan, S P Singh, K Sreenivas & V Gupta, *Sensors and Actuators B* 124(2), 329 (2007)
4. N Dewan, V Gupta, K Sreenivas & R S Katiyar, *J. Appl. Phys.*, 101, 084910 (2007)
5. N Dewan, K Sreenivas & V Gupta, *J. Crystal Growth*, 305, 237 (2007)
6. N Dewan, K Sreenivas & Vinay Gupta, *J. Appl. Phys.*, 102, 044906 (2007) (Also linked in Sept.2007 issue of *Virtual J. Nanoscale Sc.& Tech*)
7. N Dewan, K Sreenivas & V Gupta, *IEEE Trans. Ultrasonics, Ferroelectrics and Frequency Control*, 55(3), 2008
8. N Dewan, K Sreenivas & V Gupta, *Semicond. Sci. Tech.*, 23 85002.1-6 (2008)
9. N Dewan, K Sreenivas & V Gupta, *Sensors and Actuators A* 147 115 (2008)
10. N Dewan, & V Gupta, *Mat. Rsrch. Express* 2 086301 (2015).
11. N Dewan, M Tomar, K. Sreenivas & V Gupta, *Proc. of IEEE –UFFC Intl. conf.* 18 – 21 September 2005, Rotterdam, Netherlands, pp. – 1311
12. N. Dewan, D Haridas, S Shandilya, K. Sreenivas & V Gupta, *Ind. J. Engg. & Mater. Sc. (CSIR)*, 15 352 (2008).





#### Maya Verma

1. M Verma, K. Sreenivas & V Gupta, *J. Appl. Phys*, 105, 024511 (2009)
2. M Verma, A Tanwar, K. Sreenivas & V Gupta, *Ferroelectrics*, 404, 233 (2010)
3. A Tanwar, M Verma, K. Sreenivas & V Gupta, *Materials Chem. & Phys*, 130, 95 (2011)

#### Hema (Munjali) Chutani

1. H Munjal & K L Baluja, *Phys. Rev. A* 80, 052704 (2009).
2. H Munjal, K L Baluja & J Tennyson, *Phys. Rev. A* 79 032712 (2009)
3. H Munjal & K L Baluja, *J. Phys. B : At. Mol. Opt. Phys.* 40 1713 (2007)
4. H Munjal & K L Baluja, *Phys. Rev. A* 74 032712 (2006)
5. H Munjal & K L Baluja, *J. Phys. B : At. Mol. Opt. Phys.* 39 3185 (2006)
6. H Munjal et. al, XVI National Conference on Atomic and Molecular Physics 8-11 January, 2007 TIFR, Mumbai, India
7. H Munjal et. al, XV National Conference on Atomic and Molecular Physics 20-23 December, 2004, PRL, Ahmedabad, India

#### Chetana Jain

1. A. Beri, C. Jain, B. Paul, & H. Raichur, *Monthly Notices of Royal Astronomical Society*, 439, 1940 (2014)
2. C. Jain & B. Paul, *Research in Astronomy and Astrophysics*, 11, 1134 (2011)
3. C. Jain & B. Paul, *Research in Astronomy and Astrophysics*, 11, 577 (2011)
4. C. Jain & B. Paul, *Monthly Notices of Royal Astronomical Society*, 413, 2 (2011)
5. C. Jain, B. Paul, & A. Dutta, *Monthly Notices of Royal Astronomical Society*, 409, 755 (2010)
6. S. Naik, M. Das, C. Jain & B. Paul, *Monthly Notices of Royal Astronomical Society*, 404, 2056 (2010)
7. C. Jain, B. Paul, & A. Dutta, *Monthly Notices of Royal Astronomical Society*, 403, 920 (2010)
8. C. Jain, B. Paul, & A. Dutta, *Research in Astronomy and Astrophysics*, 9, 1303 (2009)
9. C. Jain, B. Paul, & A. Dutta, *Monthly Notices of Royal Astronomical Society-Letters*, 397, 11 (2009)
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#### Sukhbinder Singh Rait

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#### Ravikant Prasad

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#### Shivani Agarwal

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Number of papers published in peer reviewed journals (national / international) by faculty and students: NIL

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : All the publications are published in peer-reviewed scientific journals and are indexed in almost every International Scientific database viz. Web of Science, Scopus, SCI etc.

Monographs

**Chapter in Books**Dr. Namrata Soni

1. Dr. Namrata Soni, Ampere's Circuital Law and its Applications E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
2. Dr. Namrata Soni, Maxwell's equation: "Introduction of Displacement Current" E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
3. Dr. Namrata Soni, Analysis of AC circuits using Kirchhoff's laws E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
4. Dr. Namrata Soni, A C Bridges for measurement of Capacitances and Inductances E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
5. Dr. Narmata Soni, Circuit Analysis Theorems E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X

Dr. Chetana Jain

1. Dr. Chetana Jain, Magnetic Field Lesson 3.3: Magnetic Force, E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
2. Dr. Chetana Jain, Magnetic Properties of Matter: Magnetic parameters in matter, magnetization, magnetic field, susceptibility, permeability, relation between B, H, M, E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X
3. Dr. Chetana Jain, Magnetic Properties of Matter Lesson 4.2: Ferromagnetism, B-H curve, hysteresis E Lessons, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi). ISSN 2349-154X

Tanuj Dhawan

- A G Vedeshwar & T Dhawan, "Handbook of Functional Nanomaterials. Volume 4 - Properties and Commercialization", Ed. by M Aliofkhazraei Nova Science Publishers, Inc., New York *Chap 17*, 379 – 407 (2014)

**Books**

- Books with ISBN/ISSN numbers with details of publishers

Amit Sehgal

Amit Sehgal, ELabs, (Virtual Learning Environ., Inst. of Lifelong Learning, Univ. of Delhi, Delhi 2011). ISSN 2349-154X



### Sushil Kumar

L Kumar, V Kumar, S Kumar, (Basic Concept on calculus on variation, Apple Books Inc., Shahdara, Delhi 2015) ISBN-978-93-83996-65-0

- Citation Index
- SNIP
- SJR

- Impact factor

The publications of faculty are in peer reviewed journals with high scientific temper. The impact factor ranges from 1 to 3.5.

- h-index

### 20. Areas of consultancy and income generated:

Dr. Amit Sehgal, developed a website (URL: <http://www.csakg.com>) on free-lancer basis to provide advertising support to a Company Secretary firm

### 21. Faculty as members in

- National Committees
- International Committees
- Editorial Board

Name	Committee/Board etc.	Year
Dr. Mamta Saini	Member- Board of Research Studies	2011-12
Dr. Mona Bhatnagar	Member- Board of Research Studies	2015-
Dr. Namrata Soni	Member- Moderation Committee (Physics Theory Examinations)	2013-14
Dr. Namrata Soni	Coordinator- National Graduate Physics examination	2007-
Dr. Amit Sehgal	Member- Faculty of Interdisciplinary Sciences, University of Delhi	2011-13
Dr. Mona Bhatnagar	Member- Faculty of Interdisciplinary Sciences, University of Delhi	2013-
Sh. P K Singh	Member- Committee of Courses, Department of Electronics Science, University of Delhi	2011-13
Dr. Mona Bhatnagar	Member- Committee of Courses, Department of Electronics Science, University of Delhi	2013-

### 22. Student projects

- Percentage of students who have done in-house projects including inter departmental/programme

The percentage is nearly 100%, as all the students who have project work as per their curriculum do their projects in-house. The projects go hand-in-hand with their routine studies. Thus, they use laboratory facilities available with our department or other departments of the College.



b) Percentage of students placed for projects in organizations outside the institution i.e., in Research laboratories/Industry/ other agencies

During summer break, students often go for their knowledge and skill enhancement as project trainee/ internship/ scholarship programmes in Research laboratories/Industry/ other agencies

23. Awards/ Recognitions received by faculty and students

S.No.	Name	Award/ Recognitions
1.	Dr. Amit Sehgal	Awarded title of Champion in D-LITE Course conducted by Campus of Open Learning (COL), University of Delhi and Edinburgh College, UK at COL, Keshav Puram on November 18-21, 2013.
2.	Dr. Amit Sehgal	Awarded with Best display for Innovation Project, 2013-15.
3.	Mr. Sushil Kumar	Awarded with Best display for Innovation Project, 2013-15.
4.	Dr. Rajan Walia	Awarded with Best display for Innovation Project, 2013-15.
5.	Dr. Amit Sehgal	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
6.	Mr. Sushil Kumar	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
7.	Dr. Rajan Walia	Teaching Excellence Award In Innovation by University of Delhi for innovation project 'Designing and Optimization of Auto-Tracking Solar Energy based Energy Conversion Module for Rechargeable Appliances' (2015).
8.	Dr. Namrata Soni	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb' (2015).
9.	Sh. P K Singh	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb' (2015).
10.	Dr. Sukhbinder Singh Rait	Teaching Excellence Award In Innovation in by University of Delhi for innovation project 'Development of an eco-friendly, efficient, portable lighting source utilizing a renewable energy source and a solid state lighting solution- solar led bulb' (2015).
11.	Kaleem Ahmed	University Position III M.Sc. Physics (Final) 2011-12
12.	Priyanka Singh	University Position I M.Sc. Physics (Previous) 2011-12
13.	Sheetal Diwan	University Position III B.Sc. (Hons) Physics III 2011-12
14.	Yashika Gupta	University Position I B.Sc. (Hons) Electronics III 2011-12
15.	Heena Khurana	University Position I B.Sc. (Hons) Electronics II 2011-12
16.	Sumit Puri	University Position II B.Sc. (Hons) Electronics II 2011-12
17.	Mokshi	University Position III B.Sc. (Hons) Electronics II 2011-12
18.	Puja Puri	University Position I B.Sc. (Hons) Electronics I 2011-12



19.	Puja Aggarwal	University Position II B.Sc. (Hons) Electronics I 2011-12
20.	Nidhi Pandey	University Position III B.Sc. (Hons) Electronics I 2011-12
21.	Priyanka Singh	University Position II M.Sc. Physics (Final) 2012-13
22.	Heena Khurana	University Position II B.Sc. (Hons) Electronics III 2012-13
23.	Mokshi	University Position III B.Sc. (Hons) Electronics III 2012-13
24.	Puja Puri	University Position II B.Sc. (Hons) Electronics II 2012-13
25.	Nidhi Pandey	University Position III B.Sc. (Hons) Electronics II 2012-13
26.	Barnali Das	University Position I B.Sc. (Hons) Physics I 2012-13
27.	Kritika Dhawan	University Position II B.Sc. (Hons) Physics I 2012-13
28.	Sheetal Diwan	University Position I M.Sc. Physics (Final) 2013-14
29.	Navdeep Singh Popli	University Position II M.Sc. Physics (Previous) 2013-14
30.	Sahil Goel	University Position III B.Sc. (Hons) Physics III 2013-14
31.	Puja Puri	University Position I B.Sc. (Hons) Electronics III 2013-14
32.	Puja Aggarwal	University Position III B.Sc. (Hons) Electronics III 2013-14
33.	Priteeka Dhawan	University Position I B.Sc. (Hons) Physics II 2013-14
34.	Barnali Das	University Position II B.Sc. (Hons) Physics II 2013-14
35.	Monika Bansal	University Position III B.Sc. (Hons) Electronics II 2013-14
36.	Sahil Rizvi	University Position I B.Sc. (Hons) Electronics I 2013-14
37.	Narender Gangwar	University Position II B.Sc. (Hons) Electronics I 2013-14
38.	Sahil Goel	University Position I M.Sc. Physics (Previous) 2014-15
39.	Deepti Jain	University Position III M.Sc. Physics (Previous) 2014-15
40.	Sahil Rizvi	University Position I B.Sc. (Hons) Electronics II 2014-15
41.	Narender Gangwar	University Position III B.Sc. (Hons) Electronics II 2014-15
42.	Goutam Sharma	University Position I B.Sc. (Hons) Physics I 2014-15
43.	Astha Kakkar	University Position II B.Sc. (Hons) Physics I 2014-15
44.	Avinash Kumar	University Position II B.Sc. (Hons) Physics II 2014-15
45.	Barnali Das	University Position I B.Sc. (Hons) Physics III 2014-15
46.	Priteeka Dhawan	University Position II B.Sc. (Hons) Physics III 2014-15
47.	Monika Bansal	University Position II B.Sc. (Hons) Electronics III 2014-15

#### 24. List of eminent academicians and scientists/ visitors in the department

Name	Affiliation	Year
Dr. Naveen Kumar Verma	LASTEC, New Delhi	2013
Dr. Vinay Gupta	Dept. of Physics, University of Delhi	2013
Dr. Poornima Malhotra	LASTEC, New Delhi	2013
Dr. P.K. Singh	National Physics Laboratory, New Delhi	2014
Dr. P K Pandey	Maharaja Agarsen College, University of Delhi, New Delhi	2014
Dr. Sobhan Sen	School of Physical Sciences, Jawaharlal Nehru University, New Delhi	2014
Dr. Satyaki Bhattacharya	Department of Physics and Astrophysics, University of Delhi, Delhi	2012
Mr. Janesh Kaushik	Solid State Physics Laboratory, DR.D.O, Ministry of Defence, Government of India, Delhi	2012



## 25. Diversity of students

Name of the Course	Students from the same state	Students from other states	Students from Abroad
B.Sc. (Hons) Physics	12	62	2
B.Sc. (Hons) Electronics	9	19	0

## 26. Conferences/workshops

### National

- Organized a workshop on “Applications of Lasers in Biotechnology” held at Department of Physics and Electronics, Hans Raj College on December 16-17, 2013 funded by Department of Biotechnology, Ministry of Science and Technology, Government of India.
- Organized a workshop on “Functional Analysis and Troubleshooting of Electronic Devices for Biotechnology and Biomedical Applications” held at Department of Physics and Electronics, Hans Raj College on March 12-14, 2014 funded by Department of Biotechnology, Ministry of Science and Technology, Government of India
- Organized a workshop on “Fluorescence Studies of Organic Structures” held at Hansraj College on September 26-27, 2014 sponsored by Department of Biotechnology, Ministry of Science and Technology, Government of India. (<http://www.people.du.ac.in/~asehgal/fsos/>)

### International

NIL

## 27. Students profile Programme/ course wise

The admission to students in the said courses (Refer question no. 4) is on merit basis. The admission process comprises of filling up of University Central Pre-Admission Form and College decides Cut-off percentage (Category wise) and subsequent Cut-off for each course to admit students as per sanctioned strength. The candidates bearing the marks above Cut-off are eligible to take admission in said course. The details are listed in Criterion 2.

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.Sc. (Hons) Physics	Not available	76	63	13	100
B.Sc. (Hons) Electronics	Not available	28	27	1	100

\*M= Male \*F= Female



**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc.?**

The department is not involved with teaching PG students and the academic qualifications are PG and above for the said examinations. So, the data is unavailable due to minimal correspondence.

**29. Student progression**

The Hansraj College is a UG & PG level college with students pursuing in all fields after their graduation as mentioned below.

Student progression	Against % enrolled
UG to PG	85%
PG to M.Phil.	Not Applicable (We don't teach)
PG to Ph.D.	Not Applicable (We don't teach)
Ph.D. to Post-Doctoral	Not Applicable (We don't teach)
Employed <ul style="list-style-type: none"><li>• Campus selection</li><li>• Other than campus recruitment</li></ul>	12%
Entrepreneurship/Self-employment	3%

**30. Details of Infrastructural facilities**

**a) Library**

The College comprises of a Central Library. The department also comprises of an exclusive library for the students studying course offered by our department. The Library comprises sitting arrangement for students to study and has a repository of books above 4000. Apart from that, the students can avail facility of University Central Library with some recommendation and formalities.

**b) Internet facilities for Staff & Students**

Internet facility for Staff & Students is available as the whole campus is WiFi enabled (password protected). Each individual is provided with login and password upon registration with the Internet Facility Centre. The Internet Facility is strongly firewalled and certain spurious and unwarranted sites are banned too at the server end.

**c) Class rooms with ICT facility**

The classrooms and laboratories have ICT facility. It comprises of Overhead projectors and audio systems.





## d) Laboratories

The laboratories are well equipped with apparatus and instruments to cater the need of students as per curriculum and also to experiment for some short duration UG projects. The laboratories are spacious and even student enrichment programmes have been done in previous years to develop their skills (i.e. workshops etc.).

## 31. Number of students receiving financial assistance from college, university, government or other agencies:

A common list of the students is formed for financial assistance pursued from college and that is taken care of by a council committee (Students Welfare Committee). The university financial assistance is for position holders, differently abled students and under-privileged ones and the allotment is as per University policy. The details are listed in Criterion 5.1.2.

## 32. Details of students enrichments programmes (special lectures/ workshops/ seminar) with external experts

The department has a Cultural and Seminar society. The functions of this society are to hold student enrichment programmes such as special lectures, workshops and seminar with external experts. The following is the list of eminent Personalities who had visited in Physics and Electronics Department, Hansraj College.

Dr. Naveen Kumar Verma, LASTEC, New Delhi	2013
Dr. Vinay Gupta, Dept. of Physics & Astrophysics, University of Delhi	2013
Dr. Poornima Malhotra, LASTEC, New Delhi	2013
Dr. P.K. Singh, National Physical Laboratory, New Delhi	2014
Dr. P K Pandey, Maharaja Agarsen College, University of Delhi	2014
Dr. Sobhan Sen, School of Physical Sciences, Jawaharlal Nehru University, New Delhi	2014
Dr. Satyaki Bhattacharya, Department of Physics and Astrophysics, University of Delhi	2012
Mr. Janesh Kaushik, Solid State Physics Laboratory, DRDO, Ministry of Defence, Government of India, Delhi	2012

The talks held in the department are as follows:

- Organized talk on “Large Hadron Collider” in at Department of Physics and Electronics, Hans Raj College in September 2012.
- Organized talk on “Semiconductor Research and Development at Solid State Physics Laboratory” in at Department of Physics and Electronics, Hansraj College in September 2012.



- Organized talk on “Nano scale Sensors for Bio-medical Applications” in at Department of Physics and Electronics, Hansraj College in February, 2013.
- Organized talk on “Solar energy research work at National Physical Laboratory” in at Department of Physics and Electronics, Hansraj College in February, 2013.
- Organized talk on “Fluorescence and Spectroscopy” in at Department of Physics and Electronics, Hansraj College in September, 2014.
- Organized talk on “Microcontrollers” in at Department of Physics and Electronics, Hansraj College in September, 2014.
- Organized talk on “Laser Applications in Medical Science” in at Department of Physics and Electronics, Hansraj College in March, 2014.

### 33. Teaching methods adopted to improve student learning

- The teaching methods adopted to improve student learning comprises of short tests to continuously involve students in culture of continuous studies.
- The conventional teaching with applicability examples approach with the aid of ICT or laboratory hands-on improves their vision towards understanding the concept.
- The students are also given assignments/tasks related to their curriculum but with applicability approach to develop them towards self-exploration and prepare for self-study and research.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The Institution comprises of Discipline Committee, Grievance Cell etc. as per mandate of University of Delhi and the members of these committees are appointed periodically. Apart from that, there are Council Committees to work-up with functioning and improvement of College. The Institution also comprises of Cultural Societies and Sports Committee for the social growth and development of fraternity of the Institution.

All the faculties are Presiding Officers in University Students Elections throughout the years.

Name	Committee/Board etc.	Year
Dr. Mamta Saini	Secretary- Staff Council	2011-12
Dr. Maya Verma	Member- Student Welfare Committee	2011-12
Dr. Hema Chutani	Member- Student Welfare Committee	2011-12
Sh. P K Singh	Member- Library Committee	2011-12
Sh. P K Singh	Member- Discipline Committee	2011-12
Sh. P K Singh	Member- Development Fund Committee	2011-12
Sh. P K Singh	Member- Portal Committee	2011-12
Sh. P K Singh	Member- Sports Committee	2011-12
Sh. P K Singh	Member- Workload Committee	2011-12
Sh. P K Singh	Member- Hostel Committee	2011-12
Sh. P K Singh	Member- Admission Committee	2011-12
Dr. Amit Sehgal	Member- Seminar Committee	2011-12
Dr. Amit Sehgal	Member- Portal Committee	2011-12
Sh. P K Singh	Member- Library Committee	2012-13
Sh. P K Singh	Member- Discipline Committee	2012-13
Sh. P K Singh	Member- Finance Committee	2012-13



Sh. P K Singh	Member- Portal Committee	2012-13
Sh. P K Singh	Member- Sports Committee	2012-13
Sh. P K Singh	Member- Workload Committee	2012-13
Sh. P K Singh	Member- Hostel Committee	2012-13
Sh. P K Singh	Member- Admission Committee	2012-13
Dr. Amit Sehgal	Member- Seminar Committee	2012-13
Dr. Amit Sehgal	Member- Finance Committee	2012-13
Dr. Chetana Jain	Member- Environment Awareness Committee	2012-13
Mr. Sushil Kumar	Member- SC/ST Committee	2012-13
Dr. Mamta Saini	Member- Library Committee	2013-14
Dr. Mamta Saini	Member- Sports Committee	2013-14
Dr. Mamta Saini	Member- Workload Committee	2013-14
Dr. Mamta Saini	Member- Hostel Committee	2013-14
Dr. Mamta Saini	Member- Admission Committee	2013-14
Dr. Mamta Saini	Member- Discipline Committee	2013-14
Dr. Hema Chutani	Member- Student Welfare Committee	2013-14
Dr. Maya Verma	Member- Student Welfare Committee	2013-14
Dr. Chetana Jain	Member- Student Welfare Committee	2013-14
Dr. Amit Sehgal	Member- Portal Committee	2013-14
Dr. Amit Sehgal	Member- Finance Committee	2013-14
Mr. Sushil Kumar	Member- SC/ST Committee	2013-14
Dr. Mona Bhatnagar	Member- Central Purchase Committee	2014-15
Dr. Mona Bhatnagar	Member- Library Committee	2014-15
Dr. Mona Bhatnagar	Member- Sports Committee	2014-15
Dr. Mona Bhatnagar	Member- Workload Committee	2014-15
Dr. Mona Bhatnagar	Member- Hostel Committee	2014-15
Dr. Mona Bhatnagar	Member- Monitoring Committee	2014-15
Dr. Mona Bhatnagar	Member- Admission Committee	2014-15
Dr. Mona Bhatnagar	Member- Discipline Committee	2014-15
Dr. Namrata Soni	Convener- Time Table Committee	2014-15
Mr. Sushil Kumar	Convener- Library Committee	2014-15
Mr. Sushil Kumar	Member- Finance Committee	2014-15
Dr. Maya Verma	Member- Students Welfare Committee	2014-15
Dr. Pradeep Kumar	Member- Students Welfare Committee	2014-15
Dr. Pradeep Kumar	Member- Development Fund Committee	2014-15
Dr. Chetana Jain	Convener- Canteen Committee	2014-15
Dr. Chetana Jain	Member- Academic Affairs Committee	2014-15
Dr. Amit Sehgal	Member- Music Society (Swaranjali)	2014-15
Dr. Amit Sehgal	Member- Finance Committee	2014-15
Sh. P K Singh	Convener- Grievance Committee	2014-15
Dr. Amit Sehgal	Member- Library Committee	2015-16
Dr. Amit Sehgal	Member- Sports Committee	2015-16
Dr. Amit Sehgal	Member- Workload Committee	2015-16
Dr. Amit Sehgal	Member- Hostel Committee	2015-16
Dr. Amit Sehgal	Convener- Admission Committee	2015-16
Dr. Amit Sehgal	Member- Central Purchase Committee	2015-16
Dr. Amit Sehgal	Member- Finance Committee	2015-16
Dr. Amit Sehgal	Member- Monitoring Committee	2015-16
Dr. Amit Sehgal	Member- Portal Maintenance Committee	2015-16
Dr. Namrata Soni	Convener- Time Table Committee	2015-16
Mr. Sushil Kumar	Convener- Library Committee	2015-16



Mr. Sushil Kumar	Member- Finance Committee	2015-16
Dr. Pradeep Kumar	Member- Students Welfare Committee	2015-16
Dr. Hema Chutani	Member- Students Welfare Committee	2015-16
Dr. Chetana Jain	Member- Students Welfare Committee	2015-16
Dr. Pradeep Kumar	Member- Canteen Committee	2015-16
Dr. Hema Chutani	Member- College Complains Committee	2015-16
Dr. Namarta Soni	Member- Environment Awareness Committee	2015-16
Dr. Maya Verma	Member- Academic Affairs Committee	2015-16
Dr. Maya Verma	Member- Environment Awareness Committee	2015-16
Mr. Sushil Kumar	Member- SC /ST Committee	2015-16
Sh. P K Singh	Member- Grievance Committee	2015-16
Sh P K Singh	Member- Election Committee	2011-15
Dr. Amit Sehgal	Member- Election Committee	2015-
Mr. Sushil Kumar	Deputy Superintendent- University Theory Examinations	2011-12
Dr. Namrata Soni	Superintendent- University Practical Examinations (Physics)	2011-12
Sh. Hema Chutani	Superintendent- University Practical Examinations (Electronics)	2011-12
Dr. Namrata Soni	Superintendent- University Practical Examinations (Physics)	2012-13
Sh. P K Singh	Superintendent- University Practical Examinations (Electronics)	2012-13
Mr. Sushil Kumar	Superintendent- University Practical Examinations (Physics) (November-December 2013)	2013
Dr. Chetana Jain	Superintendent- University Practical Examinations (Physics) (May-June 2014)	2014
Dr. Mona Bhatnagar	Superintendent- University Practical Examinations (Electronics)	2013-14
Mr. Sushil Kumar	Superintendent- University Practical Examinations (Physics)	2014-15
Dr. Amit Sehgal	Superintendent- University Practical Examinations (Electronics)	2014-15
Mr. Sushil Kumar	Superintendent- University Practical Examinations (Physics)	2015-16
Dr. Amit Sehgal	Superintendent- University Practical Examinations (Electronics)	2015-16
Dr. Maya Verma	Superintendent- University Theory Examinations (May-June 2014)	2014
Dr. Namrata Soni	Superintendent- University Theory Examinations (November-December 2014)	2014
Dr. Chetana Jain	Deputy Superintendent- University Theory Examinations (May-June 2015)	2015
Sh. P K Singh	Member- Central Evaluation Cell	2011-12
Sh. P K Singh	Member- Central Evaluation Cell	2012-13
Sh. P K Singh	Convener- Central Evaluation Cell	2013-14
Mr. Sushil Kumar	Member- Central Evaluation Cell	2013-14
Sh. P K Singh	Convener- Central Evaluation Cell	2014-15
Mr. Sushil Kumar	Member- Central Evaluation Cell	2014-15
Mr. Pradeep Kumar	Member- Central Evaluation Cell	2014-15
Sh. P K Singh	Convener- Central Evaluation Cell	2015-16
Mr. Sushil Kumar	Member- Central Evaluation Cell	2015-16
Sh. P K Singh	Convener- Placement Cell	2011-12
Sh. P K Singh	Convener- Placement Cell	2012-13
Sh. P K Singh	Convener- Placement Cell	2013-14
Sh. P K Singh	Convener- Placement Cell	2014-15
Sh. P K Singh	Convener- Placement Cell	2015-16
Dr. Pradeep Kumar	Member- Placement Cell	2015-16
Mr. Sushil Kumar	Member- Placement Cell	2015-16

**35. SWOC analysis of department and Future plans****Strengths:**

1. The department of Physics and Electronics is one of the biggest departments of the college, consisting of more than 25 highly qualified faculty members.
2. The faculty members specialize in a number of branches of physics and electronics, including, condensed matter physics, Nano-technology, material science, quantum physics, high energy physics and astrophysics.
3. The faculty members are actively engaged in research and every year, the department has been publishing papers in national and international journals.
4. The laboratory staff of the department is highly trained.
5. The department has six well equipped laboratories, including dark rooms (for optics experiments), mechanics, electronics (with projector), microprocessor and computer laboratories.
6. The Physics and Electronics department attracts some of the best students and the demand for these subjects has been increasing manifold over the years.
7. Students are highly motivated and are keen to adopt new methods of teaching. Students score university positions and the results have been exhilarating.
8. The department has a Physics and Electronics society for the students. The activities include quizzes and seminars, which remarkably adds on to the class room teaching.
9. The departmental library has a collection of some of the finest books of physics and electronics. The library has a huge repository of books for undergraduate and postgraduate students.

**Weakness:**

1. The department does not believe things blindly. It is only after a thorough quality check, that we accept a proposal or purchase instruments. As a result the process becomes comparatively slow but we get stupendous results.
2. Due to limited funds and grants, the undergraduate research in the department is minimal. Hence, students opt for research programs outside the college.
3. The number of international/foreign students opting for physics and electronics at our college is quite low. Efforts should be made to increase this number and make way for student exchange programs. This is necessary to develop an international research base.
4. The interaction between students and faculty members of various affiliated colleges of the University is rather poor. There is a strong need of funds to arrange and provide for Faculty/Students development program, so that they can exchange ideas and contribute to a better future of pure sciences.
5. The curriculum is limited. The syllabus should be revised to include more of computational physics.

**Opportunities:**

1. Hansraj College has been honored with the star college scheme by the Department of Biotechnology. And with a generous funding from DBT, the department has procured several instruments/apparatus for laboratories, conducted workshops and seminars for the undergraduate students and organized educational trips.
2. The innovation projects scheme started by University of Delhi has been an excellent opportunity for the students and the faculty members of the department. The faculty members have taken the advantage eagerly. This scheme inculcates a sense of



undergraduate research in the students, thereby making them more aware of research opportunities available in India. This has also enhanced the interdepartmental research.

### **Challenges:**

1. The students come from a diverse cultural and academic background. Hence, it is a challenge to teach such a diverse group effectively.
2. It is a challenge to motivate and prepare students for increasing competition in academics, research and industry
3. The college follows the syllabus and curriculum designed by the University of Delhi. But, looking at the ongoing trends, it appears that in near future, the preference for interdisciplinary subjects and applied sciences (such as, biophysics, nuclear physics, forensic science, environmental science etc.) is bound to increase, and the students might turn away from pure science streams. Therefore, there is an urgent need to develop infrastructure beforehand and plan a proper strategy for future courses. This also requires faculty training programs.

### **Future Plans:**

1. We plan to set up a dedicated physics and electronics undergraduate research laboratory for theoretical and experimental projects.
2. We plan to develop a solar powered physics laboratory.
3. We plan to start a diploma course/skill development course for the undergraduate students, with the main objective being the employability after their graduation.
4. Efforts have to be made to increase collaboration with industrial units.





## EVALUATIVE REPORT OF THE DEPARTMENT OF SANSKRIT

1. Name of the department: SANSKRIT
2. Year of Establishment: 1948
3. Names of Programmes / Courses offered
  - B. A. (H)
  - B.A. (Programme)
  - M.A.
4. Names of interdisciplinary courses and the departments/units involved  
Nationalism and Indian Literature, Sanskrit Literature (for Hindi, History, Economics & English students)
5. Annual/ semester/ choice based credit system (programme wise): CBCS for B.A.(H) first year, Semester for B.A.(H) 2<sup>nd</sup> and 3<sup>rd</sup> year, B.A.(Programme) and M.A.
6. Participation of the department in the courses offered by other department: Economics, Computer Science, English, Hindi
7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil
8. Details of courses/ programmes discontinued (if any) with reasons: Nil
9. Number of Teaching Posts

	Sanctioned	Filled
Professors	NA	NA
Associate Professors	06	01
Asst. Professors		04

### 10. Faculty profile with name, qualification, designation, specialization

S.No.	Name	Qualification	Designation	Specialization	No.of Years of Experience	No.of Ph.D. Students guided for the last 4 years
1.	Dr. Sandhya Rathore	M.A., Ph.D.	Associate Professor	Sanskrit Vyakaran	17	05
2.	Dr. Ranjit Kumar Mishra	M.A., M.Phil. Ph.D.	Assistant Professor	Sanskrit Vyakaran	10	03
3.	Mr. Avnish Kumar	M.A., M.Phil.	Assistant Professor	Sanskrit Vyakaran	06	00
4.	Dr. Braham Prakash	M.A., M.Phil. Ph.D.	Assistant Professor	Sanskrit Vyakaran	06	00
5.	Dr. Satessh Kumar Mishra	M.A., M.Phil. Ph.D.	Assistant Professor	AdvaitVedanta Philosophy	06	00
6.	Dr. Ratish Chandra Jha	M.A., M.Phil. Ph.D.	Assistant Professor	Sanskrit Vyakaran	04	00
7.	Mr. Ajit Kumar	M.A.	Assistant Professor	Sanskrit Vyakaran	02	00





11. List of senior visiting faculty: N/A
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 10%
13. Student teacher ratio (Programme wise): 42:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: N/A
15. Qualification of teaching faculty with D.Sc/ D. Lit./ Ph.D/ M.Phil/ PG: Ph.D-5, M.Phil.-1 and P.G-1
16. Number of faculty with ongoing projects from a.) National b) International funding agencies and grants received: N/A
17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received. N/A
18. Research Centre/ facility recognized by the University: N/A
19. Publications:

S.N.	Name of Faculty	In refereed journals	Chapters in books/e-resources	Books edited/ written
1	Dr. Sandhya Rathore	00	00	07
2	Dr. Ranjit Kumar Mishra	07	00	02
3	Mr. Avnish Kumar	00	00	00
4	Dr. Braham Prakash	00	00	00
5	Dr. Satessh Kumar Mishra	00	02	02
6	Dr. Ratish Chandra Jha	00	00	2
7	Mr. Ajit Kumar	00	00	00

20. Areas of consultancy and income generated: N/A
21. Faculty as members in
  - d) National committees: N/A
  - e) International Committees: N/A
  - f) Editorial Board: N/A
22. Student projects
  - a) Percentage of students who have done in-house projects including intern departmental/ programme: N/A
  - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies: N/A



### 23. Awards/ Recognitions received by faculty and students

#### Students:

2012-13: Special Prize -	14
Scholarships -	18
ECA -	7
Academic -	9
Gold Medal -	2

2013-14: Special Prize -	4
Scholarships -	10
ECA -	2
Academic -	6
Gold Medal -	2
Archery -	5
Yoga -	5

2014-15: Scholarships -	4
ECA -	7
Gold Medal -	2

### 24. List of eminent academicians and scientists/ visitors in the department

- Prof. Shashi Prabha Kumar (JNU)
- Prof. M.M. Agarwal (D.U.)
- Prof. Mithilesh Chaturvedi (D.U.)
- Dr. Meera Dwivedi (D.U.)
- Dr. Bharatendu Pandey (D.U.)

### 25. Diversity of students

Name of the course	Students from the Same State	Students from other States	% of Students from Abroad
B.A. (H) Sanskrit	35	13	0

### 26. Conferences/workshops

- a) National: N/A.  
b) International: N/A

### 27. Students profile Programme/ course wise

Name of the course/ Programme (refer question no. 4)	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.A. (H) Sanskrit	Not available	48	41	07	56.41

\*M= Male \*F= Female



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc.?

NET-JRF – 40

29. Student progression

Student Progression	Against % Enrolled
UG to PG	80%
PG to M.Phil	40%
PG to Ph.D	60%
Ph.D to Post-Doctoral	0%
Empolyed	
• Campus selection	0%
• Other than campus selection	0%
Entrepreneurship/ Self- employment	5%

30. Details of Infrastructural facilities

- Library- : Available for teachers and students in main library. Internet facilities for staff and students - : Department has computers with internet facilities.
- Internet facilities for Staff & Students-only for staff
- Class rooms with ICT facility – Yes
- Laboratories - : N/A

31. Number of students receiving financial assistance from college, university, government or other agencies: 20

32. Details of students enrichments programmes (special lectures/ workshops/ seminar) with external experts

- Prof. Shashi Prabha Kumar (JNU)
- Prof. M.M. Agarwal (D.U.)
- Prof. Mithilesh Chaturvedi (D.U.)
- Dr. Meera Dwivedi (D.U.)
- Dr. Bharatendu Pandey (D.U.)

33. Teaching methods adopted to improve student learning

Besides conventional teaching methods we use ICT also to teach our students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

We actively participate in ISR and other activities.



### 35. SWOC analysis of department and Future plans

#### **Strengths:**

- The department has a combination of experienced and young teachers.
- The department is one of the oldest departments in the college.
- Our department has bagged top University positions in the last four years.
- Sanskrit Literary Society actively participates in extra-curricular activities and contributes to the overall development of the students.

#### **Weaknesses:**

- There's a dearth of job opportunities for our students.

#### **Opportunities:**

- Sanskrit has proven to be a lucrative subject for the students, particularly for competitive exams like UPSC & PCS
- Yoga has opened a new field for Sanskrit students.

#### **Challenges:**

- It's a great challenge to change the orthodox mindset of our students.
- A tremendous effort is required to prepare the students for cut-throat competitions in the global market.

#### **Future Plans:**

- Dedicated societies like Sanskrit Literary Society and Sanskritiki are actively working for the overall developments of students.
- We are planning to organize seminars and workshops on literary and interdisciplinary ways of teachings to cope up with the CBCS curriculum.

Besides regular teaching, we are also planning to equip our students with knowledge of modern computational world. We are in regular touch with Sanskrit Bharati and planning to organize a fifteen day workshop on spoken Sanskrit.



## EVALUATIVE REPORT OF THE DEPARTMENT OF ZOOLOGY

1. Name of the department: ZOOLOGY

2. Year of Establishment: 1964

3. Names of Programmes / Courses offered

- B.Sc. (H) Zoology
- M.Sc. Zoology

4. Names of interdisciplinary courses and the departments/units involved

- B.Sc. Life Science – Zoology; Botany; Chemistry; Mathematics; Computer Science
- B.Sc. Physical Science – Zoology; Botany; Chemistry; Mathematics; Computer Science
- B.Sc. (H) Anthropology – Zoology, Botany

5. Annual/ semester/ choice based credit system (programme wise)

a) Choice based credit system

- B.Sc. (H) Zoology – 1<sup>st</sup> Semester
- B.Sc. Life Science - 1<sup>st</sup> Semester
- B.Sc. Physical Science - 1<sup>st</sup> Semester

b) Semester system

- B.Sc. (H) Zoology -3<sup>rd</sup> Semester
- B.Sc. Life Science - 3<sup>rd</sup> Semester
- B.Sc. Physical Science - 3<sup>rd</sup> Semester
- B.Sc. (H) Anthropology - 3<sup>rd</sup> Semester

c) Semester system (FYUP)

- B.Sc. (H) Zoology –5<sup>th</sup> Semester

6. Participation of the department in the courses offered by other department: Apart from teaching Zoology, the Department also holds classes for the course like B.Sc. Life Sciences, Physical and Applied Physical Sciences. Department is actively involved in teaching Environmental Sciences Compulsory course in the college.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: With Department of Anthropology, University of Delhi

8. Details of courses/ programmes discontinued (if any) with reasons: B. Sc. Life Science has been introduced in place of the course B.Sc. General Group B.



## 9. Number of Teaching Posts

	Sanctioned	Filled
Professors	NA	NA
Associate Professors	12	3
Asst. Professors		4

## 10. Faculty profile with name, qualification, designation, specialization

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D Students Guided for the last 4 years
Shashi Dhingra	M.Sc., Ph.D	Associate Prof.	Physiology & Biochemistry	30+	
Neelam Gandhi	M.Sc., Ph.D	Associate Prof.	Neurophysiology Endocrinology	30+	
Hardeep Kaur	M.Sc., Ph.D	Associate Prof.	Entomology	25+	
Dinesh Kr. Gautam	M.Sc., Ph.D	Assistant Professor.	Reproductive Physiology/Endocrinology	9	
Vandana Km. Singh	M.Sc., M.Phil., Ph.D	Assistant Professor.	Cell and Molecular Biology	9	
Lokesh Chandra Mishra	M.Sc., Ph.D	Assistant Professor.	Molecular Parasitology & Immunology	6+	
Kaveri Chakrabarty	M.Sc., Ph.D	Assistant Professor.	Human Physiology	6+	
Pooja Arora	M.Sc., Ph.D	Assistant Professor. (Ad hoc)	Immunology & Cell & Molecular Biology	4+	
Farhat Jahan	M.Sc., Ph.D	Assistant Professor. (Ad hoc)	Fish Biology & Physiology	4 +	
Able Hutten	M.Sc.	Assistant Professor. (Ad hoc)	Ecology & Biodiversity	3+	
Jaya Malhotra	M.Sc., Ph.D	Assistant Professor. (Ad hoc)	Biotechnology & Molecular Biology	3+	
Sudhida Gautam	M.Sc., Ph.D	Assistant Professor. (Ad hoc)	Entomology	3+	

## 11. List of senior visiting faculty:

- Dr. K.K. Grover: Hansraj College, University of Delhi. (Retired Faculty).
- Dr. Anubha Das: Zakir Hussain College, University of Delhi.



- Dr. Manoj Nimesh: Khalsa College, University of Delhi.
  - Dr. Prakash Borgain: Hansraj College, University of Delhi. (Ex Faculty).
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 40%
  13. Student teacher ratio (Programme wise): 20:1
  14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: 12 (Sanctioned), 9 (Filled)
  15. Qualification of teaching faculty with D.Sc/ D. Lit./ Ph.D/ M.Phil/ PG: Mentioned in S.No 10.
  16. Number of faculty with ongoing projects from a.) National b) International funding agencies and grants received: Nil
  17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR, etc. and total grants received.

Five teachers of the Department are involved in Research Projects that have been awarded under Innovation Projects Schemes. The details of the project are mentioned below.

- a) HRC 305: "Nutritional profiling and its correlation with functional respiratory capacity in soldiers/volunteers"  
Dr. Kaveri Chakrabarty, Dr. Dinesh Kumar Gautam, Dr. Satyakam Guha
  - b) HRC 308: "Engineered biocompatible organic nanoarchitectures: A new paradigm for disinfections"  
Dr. Shweta Rastogi, Dr. Brijesh Rathi, Dr. Himanshu, Dr. Pooja Arora
  - c) HRC 312: "Synthesis of Drug doped silica nanoparticles for bioimaging and therapeutic applications"  
Dr. Chetna Gupta, Dr. Parul Pant, Dr. Farhat Jahan
  - d) HRC 313: "Critical and scientific analysis on use of alternative medicines with practical approach and case studies"  
Dr. Lokesh Chandra Mishra, Dr. Archana Singh, Dr. Jyoti Bhola
18. Research Centre/ facility recognized by the University: Proposed separate centre in college, Department is equipped with the facility for the same.
  19. Publications:

Dr. Shashi Dhingra

- Bhatia B. and Dhingra S. Some preventive and therapeutic effects of garlic (*Allium sativum*). In Hamdard National Foundation Monograph Development of Unani Drugs and herbal sources. Edited by Dr. R.B. Arora, HIMMR. pointing press, 1984





- Bhatia B., Banerjee A.K. and Dhingra S. Problem of water pollution in relation to human health. In environment and natural resources. Edited by S.V. Rana. (1985).
- Dhingra S. Katoch, S.S. and Malhotra R.K. Differential response of chick skeletal muscle to denervation. A histopathological study with reference to lipid and lipase distribution. Exp. Path. Bd. 15, S 97:104 (1978).
- Dhingra S., Baldev Singh, Bhatia B., Chhina G.S. and Bajaj J.S. Effect of cooling of sciatic nerve of frostbite in hind limbs of rats. Indian J. of physiology and Pharmacology. Vol 25 No 5, Supplement, pp. 88 (1981).
- Dhingra S. and Bhatia B. Effect of occlusion of blood flow on freezing injury in hind limbs of rats. Indian J. of Physiology. Vol. 28 (5) suppl.1, p.28 (1984).
- Dhingra S., Bhatia B., Chhina G.S. and Baldev Singh. Effect of Demedullation of freezing injury in Hind Limbs of Rats. Int. J. Biometeor. Vol. 31, No.3, pp 191-199 (1987).
- Malhotra R.K., Chawla Shashu, Sarin and Shukla. The fuel contents of the muscle fibres in the skeletal muscles of some mammals. Research Bulletin (N.S.) of the Punjab University. Vol. 24. Parts-I-II, pp, 27-31 (June 1973).
- Malhotra R.K., Dhingra S. and Katoch S.S. Alkaline phosphatase activity in normal and denervated skeletal muscles. Experientia, 34, 1206-1208 (1978).

#### Hardeep Kaur

- Orientation of the leafhopper *Amrasca devastans* (Distant) (Homoptera: *Cicadellidae*) in relation to its arrival and stay on different plants. Journal of pure and applied Zoology. Part –I. Vol. 1, pp. 143-153 (1988)
- Orientation of the leafhopper *Amrasca devastans* (Distant) (Homoptera: *Cicadellidae*) in relation to its arrival and stay on different plants. Part –II. Journal of pure and applied Zoology. Vol 2, pp.154-166. (1988)

#### Dinesh Kumar Gautam

- Dinesh K Gautam, M.M.Misro, S P Chaki, Mahesh Chandra and N.Seohgal (2007) hCG treatment raises H<sub>2</sub>O<sub>2</sub> levels and induces germ cell apoptosis in rat testis. Apoptosis, 12, 1173-1182
- Chaki SP, Misro MM, Gautam DK, Kaushik M, Ghosh D and Chakraborty GBN (2006) Estradiol treatment induces testicular oxidative stress and germ cell apoptosis in rats. Apoptosis 11 (8), 1427-1437
- Dinesh K Gautam, M.M.Misro, S P Chaki and N.Seohgal (2006) H<sub>2</sub>O<sub>2</sub> at physiological concentrations modulates Leydig cell function inducing oxidative stress and apoptosis. Apoptosis 11 (1), 39-46.
- Chaki SP, Misro MM & Ghosh D, Gautam DK and Srinivas M (2005) Apoptosis and cell removal in cryptorchid rat testis. Apoptosis 10 (2), 395-405.
- Misro MM, Choudhury L, Upreti K, Gautam DK, Chaki SP, A. S. Mahajan, R.Babbar (2004) Use of hydrogen peroxide to assess the sperm susceptibility to oxidative stress in Subjects presenting a normal semen profile. Int J Androl 27: 82-87.
- Misro MM, Chaki SP & Gautam DK (2005) Germ cell death and their removal during initial stages of testicular ischemia and cryptorchidism: A comparative analysis. Indian J of Expt Bio 43, Nov, 1080-1087.

Lokesh Chandra Mishra

- Antiplasmodial interactions between artemisinin and triclosan or ketoconazole combinations against blood stages of *Plasmodium falciparum in vitro*. Lokesh C. Mishra, Amit Bhattacharya and Virendra K. Bhasin.
- American Journal of Tropical Medicine and Hygiene 2007; 76 (3): 497–501. *Article was included in “WHO/AFRO Library Awareness Bulletin for March 2007” issued by World Health Organization (WHO).* ([http://afrolib.afro.who.int/Infodigest/Mars\\_07/ATM\\_Mar\\_07.htm](http://afrolib.afro.who.int/Infodigest/Mars_07/ATM_Mar_07.htm)) (Impact factor: The 2012 impact factor for the journal is 2.534. The journal's 5-year impact factor is 2.896, Print ISSN: 0002-9631).
- *In Vitro* activity of artemisinin in combination with clotrimazole or heat-treated amphotericin B against *Plasmodium falciparum*. Amit Bhattacharya, Lokesh C. Mishra and Virendra K. Bhasin. American Journal of Tropical Medicine and Hygiene 2008; 78(5): 721-728. (Impact factor: The 2012 impact factor for the journal is 2.534. The journal's 5-year impact factor is 2.896, Print ISSN: 0002-9631)
- Synthesis of novel substituted 1, 3-diaryl propenone derivatives and their antimalarial activity *in vitro*. Nidhi Mishra, Preeti Arora, Brajesh Kumar, Lokesh C. Mishra, Amit Bhattacharya, Satish K. Awasthi and Virendra K. Bhasin. European Journal of Medicinal Chemistry 2008; 43 (7): 1530-1535. (Impact factor: The impact factor for the journal is 3.499. The journal's 5-year impact factor is 3.849, Print ISSN: 0223-5234)
- Potent antimalarial activity of newly synthesized substituted chalcone analogs *in vitro*. Satish K. Awasthi, Nidhi Mishra, Brajesh Kumar, Manish Sharma, Amit Bhattacharya, Lokesh C. Mishra, Virendra K. Bhasin. Medicinal Chemistry Research November 2009; 18, 407-420. (Impact factor: The impact factor for the journal is 1.612. Print ISSN: 1054-2523).
- Phytochemical licochalcone A enhances antiplasmodial activity of artemisinin *in vitro*. Lokesh C. Mishra, Amit Bhattacharya, and Virendra K. Bhasin Acta Tropica 2009; 109, 194–198. *Article was included in “Malaria Bulletin” issued by United States Agency for International Development (USAID) in March, 2009.* (Impact factor: The impact factor for the journal is 2.519. The journal's 5-year impact factor is 2.710. Print ISSN: 0001-706X).
- Antimalarial pharmacodynamics of chalcone derivatives in combination with artemisinin against *Plasmodium falciparum in vitro*. Amit Bhattacharya, Lokesh C. Mishra, Manish Sharma, Satish K. Awasthi and Virendra K. Bhasin. European Journal of Medicinal Chemistry 2009; 44, 3388-3393. (Impact factor: The impact factor for the journal is 3.499. The journal's 5-year impact factor is 3.849, Print ISSN: 0223-5234).
- HIV protease inhibitors, indinavir or nelfinavir, augment antimalarial action of artemisinin *in vitro*. Lokesh C. Mishra, Amit Bhattacharya, Manish Sharma and Virendra K. Bhasin. American Journal of Tropical Medicine and Hygiene 2010; 82, 148-150. (Impact factor: The 2012 impact factor for the journal is 2.534. The journal's 5-year impact factor is 2.896, Print ISSN: 0002-9631).
- Antimalarial activity of newly synthesized chalcone derivatives *in vitro*. Neesha Yadav, Sandeep Dixit, Amit Bhattacharya, Lokesh C. Mishra, Manish Sharma, Satish K. Awasthi and Virendra K. Bhasin. Chemical Biology and drug Design 2012; 80: 340–347. (Impact factor: The impact factor for the journal is 2.507. ISSN: 1747-0285).



- Spectroscopic Interaction of a Coumarin Derivative with Bovine Serum Albumin Rajeev Sindhu, Anjani K. Tiwari, Lokesh C. Mishra, and M.M. Husain. *Cancer Biotherapy & Radiopharmaceuticals* 2012; 27(7): 452-456. (Impact factor: The impact factor for the journal is 1.381. Print ISSN: 1084-9785)
- “Combo therapy for malaria” published online in NATURE India on 13 April 2009 (doi:10.1038/nindia.2009.100). <http://www.nature.com/nindia/2009/090413/full/nindia.2009.100.html>(Nature India EISSN: 1755-3180).
- “Drug combo for HIV, malaria” published online in NATURE India on 26 February 2010 (doi:10.1038/nindia.2010.21) <http://www.nature.com/nindia/2010/100226/full/nindia.2010.21.html>(Nature India EISSN: 1755-3180)

### Dr. Kaveri Chakrabarty

- Kaveri Chakrabarty and M. Fahim. Modulation of the contractile responses of guinea pig isolated tracheal rings after chronic intermittent hypobaric hypoxia with and without cold exposure *J Appl. Physiol* (American Physiological Society) 99: 1006-1011, 2005.
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- Kaveri Chakrabarty and M. Fahim. Effect of chronic intermittent hypoxia (CIH) with and without cold exposure on the responsiveness of the isolated guinea pig trachealis: Role of the epithelium. *Departmental Retreat. Salt Fork Resort, U.S.A.* pp. 47, 2003.
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- Kaveri Chakrabarty and M. Fahim. Effect of hypoxia on airway smooth muscle activity of guinea pigs. *Ind. J. Physiol Pharmacol* 45: p122, Suppl 2001

### Pooja Arora

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### Farhat Jahan

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- Estimation of Survival Rates of Female Breast Cancer Patients in Meerut City, India” (2013) *American Journal of Cancer Epidemiology and Prevention* , 2:1-9 Ivy Union Publishing | <http://www.ivyunion.org> February 20, 2014
- Survival Study of Characteristics on Female Breast Cancer in Meerut City, India” (2015).*Asia Pacific Journal of Cancer Prevention*.(Communicated).

#### Jaya Malhotra

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### Chapter written in books:

#### Lokesh Chandra Mishra

Chapters for National Science Digital Library (NSDL) - A project of National Institute of Science Communication and Information Resources (NISCAIR) under Council of scientific and industrial research (CSIR)

1. Cells and organs of immune system. Lokesh Chandra Mishra (2005)
2. Antigens, Epitope and Haptens. Lokesh Chandra Mishra (2005)
3. AIDS and other immunodeficiencies and Autoimmunity. Lokesh Chandra Mishra (2006).

#### Pooja Arora

G P Talwar, Hemant Kumar Vyas, Rafi Shiraz Kabeer, Rita Singh, Rahul Pal, Ram A Vishwakarma, Shilpi Purswani, Pooja Arora, Prem Chopra, Lalit Kumar, Ritu Gupta.





Targeted therapy of  $\beta$ -hCG expressing cancers In: *Treatment of Advance Stage Cancer* Eds. Talwar GP, Sood OP. Narosa Publishing House, New Delhi, 2009, pp 90-95.

Jaya Malhotra

- Shailly Anand, Jaya Malhotra, Neha Niharika, Devi Lal, Swati Jindal, Jaspreet Kaur, Aeshna Nigam, Nidhi Garg, Pushp Lata, Jasvinder Kaur, Naseer Sangwan, Amit Kumar Singh, Ankita Dua, Anjali Saxena, Vatsala Dwivedi, Udit Mukherjee and Rup Lal. 2013. Chapter 23 titled “Bioremediation of Hexachlorocyclohexane (HCH) Pollution at HCH Dump Sites” in KNOWLEDGE SYSTEMS OF SOCIETIES FOR ADAPTATION AND MITIGATION OF IMPACTS OF CLIMATE CHANGE. doi 10.1007/978-3-642-36143-2\_23. ISBN NO 978-3-642-36143-2.
- E lesson for undergraduate course on Eukaryotic transposable elements under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. ISSN No. 2349-154X
- E lesson for undergraduate course on Transposons in prokaryotes under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. ISSN No. 2349-154X.
- E lesson for undergraduate course on Uses of transposons and eukaryotic viruses under the NME-CT MHRD project of Institute of Life Long Learning, University of Delhi. ISSN No. 2349-154X

Sudhida Gautam

- Gautam, R.D. and Sudhida Gautam (2008). Vermitechnology for Sustainable Agriculture, pp397-403. In *Strategies for Augmenting Soil Fertility* (eds Shiv Dhar, Manjaiah, K.M., Annapurna, K. and R.K. Rai) Division of Agronomy, Indian Agricultural Research Institute, New Delhi-12, 608p.

**Books edited:**

Lokesh Chandra Mishra

- Jointly reviewed a book manuscript on “Animal Cell Culture” in November, (2012) for PHI Learning Pvt. Ltd. (Regd. Office: M-97, Connaught Circus, New Delhi-110001, India.

Dr. Kaveri Chakrabarty

- A.S.Chakrabarty and Kaveri Chakrabarty: Fundamentals of Respiratory Physiology. Published by I.K. International Publishing House Ltd, (2006).

Able Hutten & Pooja Arora

- CONCISE ECOLOGY (2014): Able Hutten & Pooja Arora, K.P House Publications ISBN: 978-93-83996-29-2.

Sudhida Gautam

- Gautam, R.D, G.K. Mahapatro, Shashi Bhalla, K. Shankarganesh, Sudhida Gautam, Kaushal Verma and H.S. Gaur (2010). *Scientific Presentations on Parthenium-3<sup>rd</sup>* International Conference on Parthenium, December 8-10, Indian Agricultural Research Institute, New Delhi-10012, India. (xii +198).



- Gautam, R.D., G.K. Mahapatro, Shashi Bhalla, K. Shankarganesh, Sudhida Gautam, Kaushal Verma and HS Gaur 2010. Souvenir-3<sup>rd</sup> International Conference on Parthenium, December 8-10, Indian Agricultural Research Institute, New Delhi-110012, India. (vi+20).

## 20. Areas of consultancy and income generated

### **NCERT, CBSE and Other State systems (as per the Govt. Norms)**

#### Dr. Lokesh Chandra Mishra

- Resource Person/ Member of Organizing Committee in the “INSPIRE Internship Program-2012” organized by Hans Raj College, University of Delhi in Collaboration with DST from December 17-21, 2012.
- Resource person/ Expert in workshop related to translation and finalization of Biology items for National Talent Search Examination on 19.03.2014 at NCERT.
- Resource person in a workshop on “Design and Development of Biology, Mathematics and Physics kits for Higher Secondary Stage” held from 4<sup>th</sup> to 7<sup>th</sup> Feb, 2014 in Division of Educational Kits, NCERT, New Delhi.
- Resource person in a workshop on “Review and Development of Biology kit and kit manual for Higher Secondary Stage” held from 23<sup>rd</sup> to 27<sup>th</sup> June, 2014 in Division of Educational Kits, NCERT, New Delhi.
- Served as resource person in an Add-On Course organized by Swami Shraddhanand College, University of Delhi on “Culture Techniques in Biology” from 23<sup>rd</sup> March-2<sup>nd</sup> April, 2015.
- Served as resource person in a workshop “Orientation of Key Resource Persons of SCERT/SIE/RMSA/SSA on Preparation and Uses of Science and Mathematical kits developed by NCERT” from 11<sup>th</sup> – 14<sup>th</sup> August, 2014 organized by Division of Educational Kits, NCERT, New Delhi.
- Delivered invited lectures in Zoology at Parambh State Level School for Teacher Education, Jhajjar in November, 2014.
- Resource person in the workshop titled “Review & Development of Existing Science Kit at Upper Primary & Secondary Stage” held from 17<sup>th</sup> to 21<sup>st</sup> Aug and 24<sup>th</sup> to 28<sup>th</sup> Aug, 2015 (Two weeks) at Division of Educational Kits, NCERT, New Delhi.

## 21. Faculty as members in

a) National committees, b) International committees, c) Editorial board

#### Dr. Lokesh Chandra Mishra

- Ex-Member of American Association for Advancement of Science (AAAS) for several years. Membership No: 20222992
- Member of Delhi State Science Teacher’s Forum (Regd.) since June 2014. Ref No. 5674, dated 27.06.2014
- Member (external) “Dissection Monitoring Committee” Ramjas College, University of Delhi since September 2014.





## 22. Student projects

- (a) Percentage of students who have done in-house projects including intern departmental/ programme: 60%
- (b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies: 10%

## 23. Awards/ Recognitions received by faculty and students

### Neelam Gandhi

- Bagga, N., Chhina, G.S. Mohan Kumar, V & Singh, B., Possible involvement of cholinergic stimulus from medial amygdala at the level of medial preoptic area for spontaneous ovulation in rat, Ind.J.Physiol. Pharmacol., 25(5) suppl.1(1981)126. This paper won Dr. B.K. Anand Research Prize
- Received an award from the University of Delhi (2009) for being recognized as Distinguished Teacher.
- Received Dr. B.K. Anand Medal for being the Best Postgraduate in Physiology for the year 1983.

### Lokesh Chandra Mishra

- Research Paper Presentation Award (Poster) in IX International Symposium on Vectors and Vector Borne Diseases, Feb 15-17, 2008, under Junior Scientist Category (below 35 years), Position: Third; Topic: "In vitro interactions between artemisinin, triclosan or ketoconazole combinations against blood stages of *Plasmodium falciparum*".

### Jaya Malhotra

- Malhotra, J. Jindal, S. Anand, S. Dua, A. Rao, D.L.N., and Lal, R. "Studying The Effect Of Soil Microbial Diversity And Functional Marker Genes On The Pesticide Contaminated Sites". "Best Poster Award" presented in the Indo-Swiss Collaboration in Biotechnology (ISCB) International Conference entitled "Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & Other Chlorinated Contaminants" held at University of Delhi, India from 9<sup>th</sup> – 11<sup>th</sup> February, 2011.

## 24. List of eminent academicians and scientists/ visitors in the department

Prof. Rup Lal ; Department of Zoology, University of Delhi	Contribution of Molecular Techniques in Recent Advances in Biotechnology on 21.03.2014
Dr. Chandrima Saha; Director, NII, New Delhi	The inside story of cells and life on 14.08.2015
Prof. Umesh Rai; Director South Campus ; Department of Zoology, University of Delhi	Career prospects of Undergraduate Students on 03.03.2015
Dr. Satyajeet Rath, Senior Scientist, NII	Life in First Lane: Evolving Immunity on 07.02.2014
Prof. Sanjay Jain, Department of Physics & Astrophysics, University of Delhi	How Bacteria Grow-Some physical and Mathematical Puzzles on 17.02.2015
Dr. Fayyaz Qudsar, Scientist, Biodiversity Park, Delhi	Conservation of Biodiversity on 17.02.2015
Dr. Shahsi Bala Singh, Director, INMAS, DRDO	Improving the habitability of soldiers at high altitude by translational research on 12.03.2015



## 25. Diversity of students

Name of the course	Students from the Same State	Students from other States	% of Students from Abroad
B.Sc. (Hons.) Zoology	16	42	3
M.Sc. (Hons.) Zoology	35	75	

## 26. Conferences/workshops

1. “National Conference on Relevance of Nanotechnology in Biology” on March 1<sup>st</sup>, 2013, held by Department of Botany and Zoology, Hans Raj College, University of Delhi.
2. “Molecular Biotechnology Techniques” organized by Department of Zoology, Hansraj College, University of Delhi under DBT Star College Scheme with Department of Biotechnology, Govt. Of India 21st-23rd March, 2014.
3. Workshop on Bioinformatics under department of Biotechnology and Star College Project on 28.09.2015

## 27. Students profile Programme/ course wise

Name of the course/ Programme (refer question no. 4)	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.Sc. (Hons.) Zoology	Not available	61	29	32	100

\*M= Male \*F= Female

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc.?

More than 30%

## 29. Student progression

Student Progression	Against % Enrolled
UG to PG	50%
PG to M.Phil	10%
PG to Ph.D	30%
Ph.D to Post-Doctoral	5%
Empolyed	
• Campus selection	
• Other than campus selection	
Entrepreneurship/ Self- employment	10%

## 30. Details of Infrastructural facilities

- Library: Departmental library is well equipped with text books of latest editions purchased every year. Students can also refer to the Central College Library where journals and magazines are easily available.



- Internet facilities for staff and students: Department has computers with internet facilities.
- Class rooms with ICT facility: All the labs are equipped with projectors, computers and internets.
- Laboratories: Department has 4 well equipped teaching labs and also a research lab (equipped with latest instruments for biotechnology and microbiology experiments) and a museum which has a rare collection of animal species.

31. Number of students receiving financial assistance from college, university, government or other agencies: 20

32. Details of students enrichments programmes (special lectures/ workshops/ seminar) with external experts

- Workshop for Students on Molecular Biotechnology Techniques” organized by the Department of Zoology, Hans Raj College from March 21-23, 2014 under the DBT STAR College Scheme.
- Hands on workshop on immunology, organized by the Department of Zoology, Hans Raj College from September, 2014 under the DBT STAR College Scheme.
- Science-Setu programme, an initiative of NII. Under this programme, a lecture by Dr. C. Shaha, Director, NII, was arranged in the college.

33. Teaching methods adopted to improve student learning

Organized various trips for students to enhance learning & gain firsthand experience.

1. A visit to TERI Labs & Lecture
2. A lecture on Bioinformatics at NIPGR
3. Krishi Mela at Pusa Institute
4. Family Planning Institute for latest techniques in reproductive physiology
5. NDRI Karnal to study/observe latest technology being used in animal husbandry.
6. Visits to DIPAS labs, NII labs, AIIMS labs and blood bank & Thalassemia unit in St Stephens Hospital.
7. Evaluating research papers of scientists working at DIPAS.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Dr. Dinesh Kumar Gautam served as Deputy Superintendent Examination in 2011.
- Dr. Lokesh Chandra Mishra served as Deputy Superintendent and Superintendent of Examination in 2012.
- Dr. Dinesh Kumar Gautam is serving as Liaison Officer of College from 2013.
- Dr. Hardeep Kaur is currently Secretary Staff Council.
- Dr. Lokesh Chandra Mishra has served as Convener *Haritima* (Environment Society) and Student Welfare Committee.
- Dr. Kaveri Chakrabarty is serving as Convener ECA.
- Dr. Neelam Gandhi is serving as Coordinator Science-Setu Programme going on in collaboration with NII.
- Dr. Dinesh Kumar Gautam is serving as Departmental Coordinator for Star College Scheme.



- All the Faculty members are actively associated with College Administration and Maintenance.

### 35. SWOC analysis of department and Future plans

#### **Strengths:**

- Meritorious students from all parts of country are admitted on the basis of high cut off. They score well in the examination and also perform in other research activities organized by college and University.
- Department has highly qualified faculty with expertise on various disciplines like Biotechnology, Genetics, Molecular Biology, Immunology, Entomology, Physiology to name a few. They have many international publications and books to their credit.
- Teachers of the Department are also involved in popularizing science by inculcating scientific value in students through lectures and institutional visits.

#### **Weakness:**

A few equipments and chemicals for modern research work are required.

#### **Opportunity:**

Department teaches both classical and advanced Zoology. So, students have opportunity to select carrier in various fields of Zoology available in University of Delhi and other prestigious institutes. They easily crack the entrance tests of different universities. They are skilled enough to generate self employment at the end of the course.

#### **Challenges:**

In changing educational/academic scenario, we have to enhance our resources and efficacy to adopt the transformation for the betterment of Institution and Nation on the whole.



**Annexure I**



**हंसराज महाविद्यालय  
HANS RAJ COLLEGE**

दिल्ली विश्वविद्यालय

महात्मा हंसराज कॉलेज मार्ग, दिल्ली - ११०००७

UNIVERSITY OF DELHI

MAHATMA HANSRAJ COLLEGE MARG, DELHI-110007

**Declaration by the Head of the Institution**

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the Institution  
with seal:

Acting Principal  
Hans Raj College  
Delhi-110007

Place : Delhi  
Date : 07<sup>th</sup> October, 2015

Phones : 27667747, 27667458 • Fax : 27666338 • Email : principal\_hrc@yahoo.com



Annexure II

Ph. 23236351, 23232701, 23237721  
23234116, 23235733, 23232317  
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)  
UGC Website: [www.ugc.ac.in](http://www.ugc.ac.in)  
F. No. 8-336/2014 (CPP-I/C)



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002

UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

18 July 2014

The Principal,  
Hans Raj College  
Mahatma Hans Raj College Marg  
**Delhi – 110 007**

**Sub: - Recognition of Hans Raj College, Malka Ganj, Delhi – 110 007** under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

With reference to your letter no.HRC/131 dated 09.07.2014 on the above subject, I am directed to say that the name of **Hans Raj College, Malka Ganj, Delhi – 110 007** established in the year of **1948**, affiliated to **University of Delhi, Delhi** is included in the list of Colleges maintained under Section **2(f) & 12(B)** of the UGC Act, 1956 under the head **Non-Government** College teaching upto **Master's** Degree.

Yours faithfully,

  
(Charan Dass)  
Under Secretary





## Annexure III



**All India Council for Technical Education**  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 005  
Phone: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-india.org](http://www.aicte-india.org)

F. No. AICTE/NWRO/DU Colleges /HC/1-2558093851/2013-14

Date: 29/04/2015

To,

The Vice Chancellor  
University of Delhi  
University of Enclave  
Delhi - 110007

Sub: Letter of Special Approval for the Technical courses run by colleges affiliated to University of Delhi for the academic year 2013-14.

Ref: MHRD letter No. 20-2/2015 TS-II dated 16-02-2015

Sir/Madam,

University of Delhi has changed the duration of all Degree Courses from 3 years to 4 years in the A/Y 2013-14. The duration has again been rolled back to 3 years on the direction of UGC. The duration of B. Tech Programme has however been retained to 4 Years. Further, the approval of AICTE for the 4 Year B. Tech Programme has not been obtained by these institutions. With a view to streamline this, UGC has issued guidelines to University of Delhi vide letter No. 43-10/2013(CU dated 29/06/2014 and University of Delhi forwarded the UGC guidelines to all its colleges for necessary action.

Further, MHRD vide letter No. 20-2/2015 TS-II dated 16-02-2015 has informed that the matter regarding approval of 4 year B. Tech Programmes under the colleges of University of Delhi has been examined in the Ministry. In the light of MHRD directions under clause 20 (I), chapter 4 of AICTE Act, 1987 and the subsequent approval of E.C. in its meeting held on 07/04/2015 and Council Meeting held on 09/04/2015 and 27-04-2015, I am directed to convey the onetime special approval to

Regional Office	NWRO, Chandigarh	Application Id	1-2558093851
Name of the Institute	HANSRAJ COLLEGE, DELHI - 110007	Institute Address	UNIVERSITY OF DELHI, MAHATMA HANSARAJ MARG, MALKA GANJ
Institute Type	Government aided		

to conduct following courses with the intake indicated below for the academic year 2013-2014

Application Id : 1-2558093851				Course	Full / Part Time	Affiliating Body	Intake for 2013-14 as certified by University of Delhi	PIO	NRI
S. No.	Programme	Shift	Level						
1	ENGINEERING AND TECHNOLOGY	Ist Shift	UG	Electronics	Full Time	University Of Delhi	33	NO	NO
2	ENGINEERING AND TECHNOLOGY	Ist Shift	UG	Computer Science	Full Time	University Of Delhi	54	NO	NO





**All Institutions shall fulfill the following general conditions:**

1. The Institution shall not conduct any course(s) in the field of technical education in the same premises / campus and / or in the name of the Institution without prior permission / approval of AICTE. If found so, appropriate action as per the notified regulations shall be initiated against the Institution.
2. The institution shall operate only from the approved location, and that the institution shall not open any off campus study centers / extension centers directly or in collaboration with any other institution / university / organization for the purpose of imparting technical education without obtaining prior approval from the AICTE. If found so, appropriate action as per the notified regulations shall be initiated against the Institution.
3. The tuition and other fees shall be charged as prescribed by the Competent Authority of the University of Delhi within the overall criteria prescribed by the Council from time to time. No capitation fee shall be charged from the students / guardians of students in any form. If found so, appropriate action as per the notified regulations shall be initiated against the Institution by the Competent Authority of the University of Delhi.
4. The teaching and other staff appointed for the course shall fulfill the qualifications and experience prescribed by the Council from time to time and pay scales are as per the norms prescribed by the Council from time to time.
5. It shall be mandatory for the institution to maintain a Website providing the prescribed information. The Website information must be continuously updated as and when changes take place.
6. It is open for the Competent Authority of the University of Delhi to carry out random inspections round the year for verifying the status of the Institutions to ensure maintenance of norms and standards.
7. The Institution by virtue of the approval given by the Council shall not automatically become claimant to any grant-in-aid from the Central or State Government.
8. The Institute shall take appropriate measures for prevention of ragging in any form, in the light of AICTE regulation "Prevention and Prohibition of Ragging in Technical Institutions, Universities including Deemed to Universities imparting technical education" Regulation 2009 (F.No. 37-3/Legal/AICTE/2009 dated 01/07/2009). In case of failure to prevent the instances of ragging by the Institutions, appropriate action as per the notified regulations will be taken.
9. This is a "One time approval" given to the institute for the batch admitted in 2013-14 only and will not be valid for any other technical course without prior approval of the Council.
10. The institute shall submit compliance report of the affidavit regarding the deficiencies existing in the institution within the time duration, failing which, appropriate disciplinary action will be taken.

The Management of the Institute shall strictly follow further conditions as may be specified by the Council from time to time. The Competent Authority of the University of Delhi will monitor the Academic Progress and also other administrative matters from time to time and any violation of the above conditions and / or non-adherence to the norms and standards prescribed by the Council, misrepresentation of facts and submitting factually incorrect information will be liable for penal action.

Dr P.B. Ullagaddi  
Advisor-II (Approval Bureau)

**Copy to:**

1. **The Regional Officer,**  
Plot No. 1A, 5<sup>th</sup> Floor, DTE(Pb.) Building,  
Dakshin Mark, Sector 36-A, Chandigarh-160 036
2. **The Secretary to Govt**  
Higher Education, MHRD, Shastri Bhawan, New Delhi
3. **The Director Of Technical Education,**  
(Higher & Technical Education)  
Muni Maya Ram Marg,  
Pitampura,  
Near T V. Tower, Delhi-110088
4. **The Registrar, University of Delhi** to submit an undertaking stating that the syllabus of the B. Tech courses under the Four Year Undergraduate Programme introduced by it in the AY 2013-14 is at par to the curriculum imparted in AICTE approved institutions. Further the University shall have periodic review of the academic progress in respect of courses under intimation to the Council.
5. **The Principal / Director,**  
Hansraj College,  
University of Delhi,  
Mahatma Hansraj Marg, Malkaganj  
Delhi - 110007
6. **Guard File(AICTE)**