

Peer-Peer Mentoring Program

Student Learning Center, Hansraj College

Month and Year: October' 2022

Department: Physics and Electronics

Name of the Departmental Program Coordinator: Dr. Ravikant Prasad

S. No	Name of the Mentor	Semester	Number of sessions	Date and Time (of each session)	Topics covered (in each session)	No. of Mentees attended (per each session)
3	Mr. Umesh Jangra	V	2 session of 2 hours each (4 hours)	09-10-2022; 11:00 am - 01:00 pm	Fourier Series-I	10
				16-10-2022; 11:00 am - 01:00 pm	Fourier Series-II	5

Mentor: Mr. Umesh Jangra

Course: B. Sc. (H) Physics

Current Semester: V

Email id: umeshkumarramgarh555@gmail.com



OCTOBER 09' 2022

Periodic functions.

Orthogonality of sine and cosine functions,

Dirichlet Conditions (Statement only).

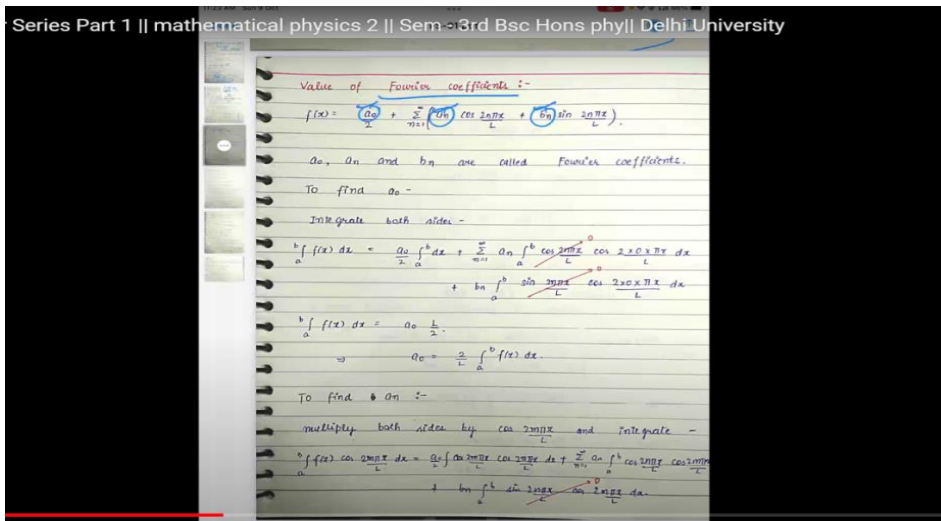
Expansion of periodic functions in a series of sine and cosine functions determination of Fourier coefficients

Meeting Attendance

Meeting Summary

Total Number of 24
 Meeting Title General
 Meeting Start Time 10/9/2022, 10:59:30 AM
 Meeting End Time 10/9/2022, 12:30:19 PM
 Meeting Id f29ba680-84be-4cb6-acd9-

Full Name	Join Time	Leave Time	Duration	Email
umesh14247	10/9/2022, 10:59:30 AM	10/9/2022, 12:30:19 PM	1h 30m	umesh14247@hrc.edu.du.ac.in
piyush3916	10/9/2022, 10:59:54 AM	10/9/2022, 12:29:31 PM	1h 29m	piyush3916@hrc.edu.du.ac.in
pallavi3998	10/9/2022, 11:01:20 AM	10/9/2022, 11:04:55 AM	3m 34s	pallavi3998@hrc.edu.du.ac.in
pallavi3998	10/9/2022, 11:08:10 AM	10/9/2022, 12:30:14 PM	1h 22m	pallavi3998@hrc.edu.du.ac.in
abhishek3987	10/9/2022, 11:01:51 AM	10/9/2022, 11:28:10 AM	26m 18s	abhishek3987@hrc.edu.du.ac.in
vatika4009	10/9/2022, 11:02:47 AM	10/9/2022, 11:06:52 AM	4m 5s	vatika4009@hrc.edu.du.ac.in
sona4013	10/9/2022, 11:03:18 AM	10/9/2022, 11:19:12 AM	15m 54s	sona4013@hrc.edu.du.ac.in
himadri3959	10/9/2022, 11:03:40 AM	10/9/2022, 11:04:05 AM	24s	himadri3959@hrc.edu.du.ac.in
ca3969	10/9/2022, 11:03:56 AM	10/9/2022, 12:30:16 PM	1h 26m	ca3969@hrc.edu.du.ac.in
sangeeta3924	10/9/2022, 11:05:20 AM	10/9/2022, 12:30:16 PM	1h 24m	sangeeta3924@hrc.edu.du.ac.in
satendra3917	10/9/2022, 11:05:42 AM	10/9/2022, 11:16:44 AM	11m 2s	satendra3917@hrc.edu.du.ac.in
vikalp4037	10/9/2022, 11:08:15 AM	10/9/2022, 11:08:26 AM	10s	vikalp4037@hrc.edu.du.ac.in
sachin3951	10/9/2022, 11:09:35 AM	10/9/2022, 11:28:10 AM	18m 34s	sachin3951@hrc.edu.du.ac.in
ankit3937	10/9/2022, 11:12:21 AM	10/9/2022, 12:07:39 PM	55m 18s	ankit3937@hrc.edu.du.ac.in
ankit3937	10/9/2022, 12:08:46 PM	10/9/2022, 12:14:27 PM	5m 41s	ankit3937@hrc.edu.du.ac.in
shubham3994	10/9/2022, 11:16:48 AM	10/9/2022, 11:17:22 AM	33s	shubham3994@hrc.edu.du.ac.in
aryan3906	10/9/2022, 11:17:46 AM	10/9/2022, 11:21:18 AM	3m 32s	aryan3906@hrc.edu.du.ac.in
rhishita3910	10/9/2022, 11:18:13 AM	10/9/2022, 11:18:26 AM	12s	rhishita3910@hrc.edu.du.ac.in
suhail3928	10/9/2022, 11:18:57 AM	10/9/2022, 11:21:52 AM	2m 54s	suhail3928@hrc.edu.du.ac.in
kaku4034	10/9/2022, 11:21:48 AM	10/9/2022, 11:28:12 AM	6m 23s	kaku4034@hrc.edu.du.ac.in
tamanna3911	10/9/2022, 11:27:27 AM	10/9/2022, 11:28:15 AM	48s	tamanna3911@hrc.edu.du.ac.in
yash3907	10/9/2022, 11:35:44 AM	10/9/2022, 11:36:03 AM	19s	yash3907@hrc.edu.du.ac.in
anur14222	10/9/2022, 11:41:10 AM	10/9/2022, 11:44:38 AM	3m 28s	anur14222@hrc.edu.du.ac.in
chirag3935	10/9/2022, 11:51:25 AM	10/9/2022, 11:56:21 AM	4m 55s	chirag3935@hrc.edu.du.ac.in
mindup3581	10/9/2022, 12:09:36 PM	10/9/2022, 12:10:48 PM	1m 11s	mindup3581@hrc.edu.du.ac.in
jagrati3931	10/9/2022, 12:19:02 PM	10/9/2022, 12:19:27 PM	25s	jagrati3931@hrc.edu.du.ac.in



OCTOBER 16' 2022

Meeting Attendance

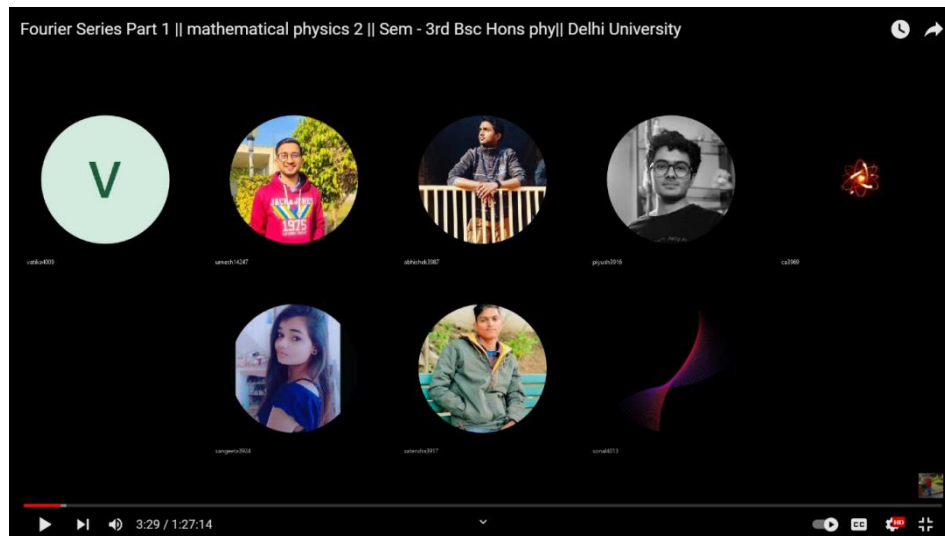
Meeting Summary
Total Number of Participants 9
Meeting Title General
Meeting Start Time 10/16/2022, 10:55:24 AM
Meeting End Time 10/16/2022, 11:44:40 AM
Meeting Id 677569c4-4690-41e2-a829-ead10b1ce50f

Full Name	Join Time	Leave Time	Duration	Email	Role
umesh14247	10/16/2022, 10:55:24 AM	10/16/2022, 11:44:37 AM	49m 13s	umesh14247@hrc.edu.du.ac.in	Presenter
yash3907	10/16/2022, 10:59:07 AM	10/16/2022, 10:59:14 AM	7s	yash3907@hrc.edu.du.ac.in	Attendee
yash3907	10/16/2022, 11:35:03 AM	10/16/2022, 11:35:12 AM	8s	yash3907@hrc.edu.du.ac.in	Attendee
amrutha3955	10/16/2022, 11:03:32 AM	10/16/2022, 11:44:39 AM	41m 6s	amrutha3955@hrc.edu.du.ac.in	Attendee
sahana3903	10/16/2022, 11:03:45 AM	10/16/2022, 11:44:40 AM	40m 55s	sahana3903@hrc.edu.du.ac.in	Attendee
risha3991	10/16/2022, 11:09:03 AM	10/16/2022, 11:09:40 AM	36s	risha3991@hrc.edu.du.ac.in	Attendee
tejas3947	10/16/2022, 11:11:18 AM	10/16/2022, 11:19:41 AM	8m 23s	tejas3947@hrc.edu.du.ac.in	Attendee
rokee3993	10/16/2022, 11:21:53 AM	10/16/2022, 11:22:35 AM	42s	rokee3993@hrc.edu.du.ac.in	Attendee
ankit3937	10/16/2022, 11:22:23 AM	10/16/2022, 11:23:12 AM	49s	ankit3937@hrc.edu.du.ac.in	Attendee
sangeeta3924	10/16/2022, 11:30:50 AM	10/16/2022, 11:44:38 AM	13m 47s	sangeeta3924@hrc.edu.du.ac.in	Attendee

Revised all of the concepts of Fourier series again, followed by: Parseval's relation, Half sine series, Half cosine series, Applications

Even and odd functions and their Fourier expansions (Fourier Cosine Series and Fourier Sine Series).

Summing of Infinite Series: Parseval's Identity and its application to summation of infinite series.



Hello people !!

Ques. $f(x) = x \cos x$

Range is $(-\pi < x < \pi)$

Solⁿ. Given function $f(x) = x \cos x$ is an odd function. So $a_0 = a_n = 0$ clearly.

Task is to find b_n - ?

$$b_n = \frac{2}{\pi} \int_0^{\pi} f(x) \sin nx \, dx$$

