**Business Mathematics Study Material for B.Com(H) IIyr Sem 4- 13th to 17thApril 2020**

Dear Students

In the week of 13th to 17th April 2020 we had to cover the following topics from “Applications of Partial Differentiation” and “Introduction to Integration”. Kindly go through these topics (from the pages mentioned below from our text book J.K. Thukral “Business Mathematics”) and solve all the examples. I am also attaching the relevant youtube videos (most relevant available video for our topic) which will help you understand the topic well.

1. Applications of Partial Differentiation (Chapter-9)

* Constant Product Curves or Isoquants (pg 9.27 to 9.32)
* Elasticity of Substitution (pg 9.32 to 9.36)
* Lagrange Multipliers (pg. 9.38 to 9.42)
* Applied Optimisation Problems (pg 9.43 to 9.54) <https://www.youtube.com/watch?v=cyjPAaI7MpI>

1. Introduction to Integration (Chapter-10; to be done to brush up the concepts, more emphasis to be given to Chapter-11 i.e. Applications of Integration)

* The Indefinate Integral (pg 10.1 to 10.5)

<https://www.youtube.com/watch?v=-USwYEL91Is>

* Techniques of Integration (pg 10.7 to 10.19)
  1. Integration by Substitution

<https://www.youtube.com/watch?v=rNLnz0I094c>

* 1. Integration by Parts

<https://www.youtube.com/watch?v=AwKdxVHudZM>

* 1. Integration by Partial Fractions

<https://www.youtube.com/watch?v=fBZZAk8hdUo>

* The Definite Integral (pg. 10.23 to 10.27)- (ignore Sin, Cos, Tan questions; only simple questions in your syllabus)
  1. Introduction to Concept

<https://www.youtube.com/watch?v=VMLRlKqjhwM>

* 1. Properties of Definite Integration

<https://www.youtube.com/watch?v=_3GVEWQ6W6Q>

Thanks and All the Best!

Dr. Meghna Malhotra

Assistant Professor

Department of Commerce

Hansraj College

University of Delhi