**Business Mathematics Study Material for B.Com (H) IIyr Sem 4- 6th to 10thApril 2020**

Dear Students

In the week of 6th to 10th April 2020 we had to cover the following topics from “Partial Differentiation” “Applications of Partial Differentiation”. 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. Introduction to Partial Differentiation (Chapter-8, to be done to brush up the concepts; more emphasis has to be on applications i.e. chapter-9)

* Functions of two Variables (pg 8.1 to 8.2)
* Partial Derivatives (pg 8.2 to 8.5)
* Second Order Partial Derivatives (pg 8.7 to 8.10)
* Homogeneous Functions and Euler’s Theorm (pg 8.10 to 8.16)
* Total Differential (pg 8.17 to 8.19)
* Second Order Total Differentials (pg 8.19 to 8.21)
* Maxima and Minima of Functions of Two Variables (pg 8.21 to 8.23)

\*Mostly covered by the following two videos

<https://www.youtube.com/watch?v=UI1G4NaaOXY>

<https://www.youtube.com/watch?v=y_fwnYev2yo>

1. Applications of Partial Differentiation (Chapter-9)

* Demand Analysis (pg 9.2 to 9.11)

<https://www.youtube.com/watch?v=dqULE8tyOXw>

* The Production Function) (pg 9.13 to 9.25) <https://www.youtube.com/watch?v=nWgNIo-DXG4&t=5s>

Thanks and All the Best!

Dr. Meghna Malhotra

Assistant Professor

Department of Commerce

Hansraj College

University of Delhi