

Department of Economics,
Delhi School of Economics
University of Delhi

Minutes of Meeting

Subject : B.A. (H) Economics
Course : Introductory Mathematical Methods for Economics Econ002
Date : 10th August, 2023 at 11.00 p.m.
Venue : Department of Economics
Chair : Dr. Sandip Datta/Dr. Sourav

The meeting was attended by the following teachers:

S.No.	Name	College
1	Priyambada Gupta	Shyam Lal College
2	Priyanka	Ramjas college
3	Sandeep Kanyal	ARSD ,Dhaulta kuan
4	Sanjeev Grewal	St.Stephen's College
5	Akanksha	Daulat Ram College
6	Nikita Gupta	Shivaji College
7	Pankaj Yadav	Shaheed Bhagat Singh College
8	Dr Indranil Chowdhury	PGDAV College (M)
9	Deepanshi Rajput	Janki Devi Memorial College
10	N Shradha Varma	Maitreyi College
11	Dr Niti khandelwal Garg	Kirori Mal College
12	Sonakshi	Sri Venkateswara College
13	Preeti Mann	Kamala Nehru College
14	Anita	Lakshmibai college
15	Manavi Jain	Miranda House
16	Manavi Jain	Miranda House
17	Jyoti kumari jyotshna	Satyawati college

The meeting involved a comprehensive discussion of different aspects of the course itself, including teaching and the evaluation process for the current semester. The committee reached a consensus on the following points

1. The syllabus and reading list for the course in the current semester will remain as they are. The primary textbook for this course will be Chapters 1 to 9 from "*Mathematics for Economic Analysis*" (2nd Edition) by Sydsaeter and Hammond.
2. The teachers who attended the meeting are in agreement about the need to update "*Mathematics for Economic Analysis*" to its latest available edition, authored by Sydsaeter *et al.* from the next academic year. However, this update will only be carried out upon the endorsement of the review committee. A dedicated committee has been established for this

purpose, and they are expected to provide their recommendation by October 15, 2023. The committee is comprised of the following members:

Sl No	Name	College
1	Sanjeev Grewal	St. Stephens College
2	Indranil Chaudhary	PGDAV College
3	Niti khandelwal Garg	Kirori Mal College
4	Shruti Sabharwal	Jesus and Mary College(JMC)

3. A diverse range of topics related to the evaluation process were extensively discussed. The assessment process comprises three distinct parts, and the ensuing pattern will be adhered to:

- I. Internal Assessment (IA): 30 Marks
 - Two class test (12 marks each), and
 - 6 marks for attendance
- II. Continuous Assessment (CA): 40 Marks
 - 1 Problem Solving for 10 marks
 - At least 2 quizzes, adding up to total 25 marks.
 - 5 Marks for attendance.
- III. The end semester exam: 90 Marks
 - There will be three sections in the question paper with varying degrees of difficulty.
 - Question can be asked from any unit.
 - There will be only two sub-sections in each question, e.g. 2+8, 5+5, etc.
 - Section A: 40 Marks ($4 \times 10 = 40$, Students will attempt any 4 out of 6)
 - Section B: 30 Marks ($3 \times 10 = 30$, Students will attempt any 3 out of 4)
 - Section C: 20 Marks ($2 \times 10 = 20$, Students will attempt any 2 out of 3)

The syllabus, teaching hours and topic-wise reading references

Unit 1 Preliminaries

Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems.

Ref: Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*. Pearson Education.
(Chapter - 1)

Unit 2 Functions of one real variable

Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; continuous functions: characterisation, properties with respect to various operations and applications; differentiable functions: characterisation, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.

Ref: Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*. Pearson Education.
(Chapter – 2 to 8)

Unit 3 Single-variable optimization

Geometric properties of functions: convex functions, their characterisation and applications; local and global optima: geometric and calculus-based characterisation, applications.

Ref: Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*. Pearson Education.
(Chapter – 9)