### Minutes of the Meeting

# Introductory Statistics for Economics

# Date: 27<sup>th</sup> October, 2022

Subject :	B.A. (Hons) Economics – First Semester (2022)
Course Code :	ECON003
Course Abbreviation:	STAT 1
Credits :	4
Duration (per week) :	4 hours (3 Lectures+ 1 Tutorial)
Date of Meeting :	27 <sup>th</sup> October 2022
Venue :	Delhi School of Economics
Chair :	Prof. Pami Dua and Dr. Reetika Garg

### Attended By:

Pawan Kumar	Ramjas College
Yogita Yadav	Sri Venkateswara College
Anu Singh Deswal	Jesus and Mary College
Deepika Goel	Aryabhatta college
Shweta Nanda	ARSD
Renu Kumari Verma	Motilal Nehru College Evening
Ajay Kumar	Kamala nehru college
Anuj Kumar	Satyawati College(E)
Gurpinder Kaur	Shaheed Bhagat Singh College
Dr.D Appala Naidu	ARSD
Sarweshwar Kumar Gautam	Satyawati College
Ankur Bhatnagar	Satyawati College
Aishwarya	Gargi College

Dr. Arun Kumar	DCAC	
Dr Pooja Sharma	Daulat Ram College	
Kanika Aggarwal	Shri Ram college of commerce	
Yogita Yadav	Sri Venkateswara College	
Rakesh Kumar	Dyal Singh College	
Shubhi Singh	Lady Shri Ram College for Women	
Paramjeet Kaur	Sri Guru Gobind Singh College of Commerce	
Ramesh Kumar	BNC	

**Course Objectives**: The course familiarizes students with methods of summarizing and describing important features of data. The course teaches students the basics of probability theory and sets a necessary foundation for Inferential Statistical Theory and the Econometrics courses. The familiarity with probability theory will also be valuable for courses in economic theory.

**Course Learning Outcomes**: The student would understand the concept of probability, random variables and their distributions and become familiar with some commonly used discrete and continuous distributions of random variables so that they would be able to analyse various real-life data.

A meeting of teachers of this course was held to discuss the following:

- ➤ The detailed reading list for the UGCF course to be implemented in the academic session 2022-23.
- $\succ$  The pattern of the semester-end exam.
- How to give a good intuition of the concepts to the students by using some practical concepts.

Since this paper is taught in its present form for the first time, under UGCF, a sub-committee was constituted to review the suggested readings. The committee consisted of the following teachers:

- 1 Deepika Goel, Aryabhatta College
- 2 Paramjeet Kaur, Sri Guru Gobind Singh College of Commerce
- 3 Priyanka Bhatia, SRCC College
- 4 Poonam Kalra, St. Stephen's College
- 5 Pooja Sharma, Daulat Ram College

The issues discussed in the meeting are as follows:

- Teachers suggested that from the suggested readings in the syllabus, J Devore and Hogg, Tanis and Zimmerman (HT&Z) could be used as core textbooks. John Rice could be a suggested reading for the teachers
- 2. Chapter-wise exclusions are reported in the table given below for detailed readings.
- **3.** Moment Generating Function (MGF)treatment of distributions is excluded.
- **4.** Students should be aware of the following topics; however, no questions should be asked in the examinations:

a) Stem and Leaf Display

b) Only analytical questions on pictorial representation should be asked in the exams

c) Double integration for Joint continuous random variables in Ch 5 should be kept simple.

- **5.** In order to achieve uniformity in evaluation of final answer scripts, it was decided to include the following note in final question paper:
  - a) All questions within each section are to be answered in a contiguous manner on the answer sheet. Start each question on a new page, and all sub-parts of a question should follow one after the other.
  - b) All intermediate calculations should be rounded off to 3 decimal places. The values provided in statistical tables should not be rounded off. All final calculations should be rounded off to two decimal places.
- **6.** It was agreed that the question paper will include internal choice in each section with limited number of sub-parts.
- **7.** The following distribution of topics, indicative weightage, and the amount of choice within each section, was agreed upon:
  - a. Section 1: Unit 1 and Unit 2: (weightage 20 marks), Two questions of 10 marks each with one question from Unit 1 and the other from Unit 2. Internal choice in these units should be given as 2 out of 3 questions
  - b. Section 2: Unit 3: (weightage 20 marks), Two questions out of Three for 10 marks each.
  - c. Section 3: Unit 4: weightage 20 marks), Two questions out of Three for 10 marks each.
  - d. Section 4: Unit 5: (weightage 15 marks), Three questions out of Four for 5 marks each.
- **8.** There would be no compulsory question in any of the sections.
- **9.** The internal assessment would comprise of 10 marks Class test, 10 marks Class test/assignment. Attendance will carry 05 marks.

The details of the Course Content, Topic-wise Reading list, recommended textbooks are given below:

### Content (Unit-wise):

Unit 1: Introduction and overview

The distinction between populations and samples and, between population parameters and sample statistics; Pictorial Methods in Descriptive Statistics; Measures of Location and Variability. Unit 2: Elementary probability theory

Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence.

Unit 3: Random variables and probability distributions

Defining random variables; discrete and continuous random variables, probability distributions; expected values and functions of random variables.

Unit 4: Special Probability Distributions

Properties of commonly used discrete and continuous distributions (uniform, binomial, exponential, Poisson, hypergeometric and Normal random variables).

Unit 5: Random sampling and jointly distributed random variables

Density and distribution functions for jointly distributed random variables; computing expected values of jointly distributed random variables; conditional distributions and expectations, covariance and correlation.

Unit No.	ΤΟΡΙϹ	READINGS FROM CORE TEXTS
1.	Introduction and Overview	Devore: Ch 1
2.	Elementary Probability Theory	Devore: Ch 2 Hogg, Tanis and Zimmerman: Ch 1
3.	Random Variables and Probability Distributions	Devore: Ch 3 (3.1-3.3), Ch 4 (4.1-4.2) Hogg, Tanis and Zimmerman: Ch 2 (2.1-2.2), Ch 3.1
		Devore: Ch 3 (3.4-3.6) except negative binomial
		distribution, Ch 4 (4.3-4.4) except gamma distribution
4. Special Probability Distributions	Hogg, Tanis and Zimmerman: Ch 2 (2.4, 2.5 and 2.7), Ch 3 (3.2-3.3) except gamma and chi-square distributions (MGF treatment of distributions is not included)	
5.	Random Sampling and Jointly Distributed	Devore: Ch 5.1-5.3 (except pgs 200-202), 5.4, 5.5
	Random Variables	Hogg, Tanis and Zimmerman: Ch 4 (4.1-4.4) [Double integration can be kept simple]

### **Essential Readings:**

- 1. Devore, J. (2012). Probability and Statistics for Engineers, 8th ed. Cengage Learn-ing.
- 2. Hogg, R., Tanis, E., Zimmerman, D. (2021) Probability and Statistical inference, 10th Edition, Pearson.
- 3. Miller, I., Miller, M. (2017). J. Freund's Mathematical Statistics with Applications, 8th ed. Pearson.

### **Recommended Readings for Teachers:**

- 1. John A. Rice (2007). Mathematical Statistics and Data Analysis, 3rd ed. Thomson Brooks/Cole.
- 2. Gelman, A., & Nolan, D. (2017). Teaching statistics: A bag of tricks. Oxford University Press.

# **Minutes of the Meeting**

# **Introductory Microeconomics**

- Course Code : ECON001
- Course Abbreviation : MICRO1
- Credits: 4
- Duration (per week): 4 hours (3 lectures+1 tutorial)

Meeting held on 18 October 2022, 5 pm (online)

Conducted By: Prof Anirban Kar & Vishruti Gupta

Attended By:

A J C Bose	Shri Ram College of Commerce
Aakriti Saini	Satyawati College (M)
Ankur	Satyawati college
Aruna Rao	Sri Venkateswara College
Anuradha	6
Apoorva Gupta	Hansraj College
Ashwini Kumar	, .
Basanti	
Bindu Oberoi	I. P. College
Devendra Kumar	-
Dr Indranil Chowdhury	PGDAV College (Day)
Dr Punam Tyagi	Kalindi Colleve
Dr Renu Kumari Verma	Motilal Nehru College (E)
Dr. Anshika Sagar	Hindu College
Dr. Bhawana Pareek	Shaheed Bhagat Singh College
Dr. Rupali Sharma	SGTB Khalsa College
Dr.Gunjan Agarwal	Lakshmibai College
Swaran Lata Meena	
Dr.Renu Sinha	Satyawati College
Gunjan Aggarwal	
Gurpinder Kaur	Shaheed Bhagat Singh College
Hema Nagpal	
J Khuntia	School of Open Learning
Kapila Mallah	
Meena Singh	
MAMTA	Shaheed Bhagat Singh
Neha Atri	
Nidhi Pande Aggarwal	(DCAC)
Hema Kapur	Hansraj College
Priyanbada Gupta	
Pooja Yadav Baanali Cayanka	Miranda House College
Roopali Goyanka	Indraprastha College for Women
Rupali Sharma	SGTB Khalsa

Ruchi Bhalla	Jesus and Mary College
Ravinder Ram	Satyawati College (Day)
Saachi Bhutani Bhagat	Daulat Ram College
Sanjeev Grewal	St. Stephen's College
Sarweshwar Kumar Gautam	Satyawati College
Saumya Shukla	Maharaja Agrasen College
Shivani Verma	
Sonia Goel	Ramjas college
Swati Yadav	Bhagini Nivedita College
Vandana yadav	Bharati College
Yamini	Dr. Bhim Rao Ambedkar College
Yogeshwar Kanu	

#### • Course Objectives:

This course is designed to expose students to the basic principles of microeconomic theory. The emphasis will be on teaching the fundamental economic trade-offs and allocation problems due to scarcity of resources. This course will use graphical methods to illustrate how microeconomic concepts can be applied to analyze real-life situations.

#### Course Learning Outcomes:

Students will learn to think about economic trade-offs and opportunities. They will learn the fundamentals of market mechanisms and government interventions.

• Content (Unit-wise):

#### Unit 1 : Introduction to economic trade-offs

Resources and opportunities, Gains from trade, Individual and society

[ALL] Chapter 1, 2, 3 3 Weeks

#### Unit 2 : How market works

Supply and demand, Price and resource allocation, Elasticity, Market, trade and welfare.

[ALL] Chapter 4, 5, 6, 7, 8 6 Weeks

#### Unit 3 : Role of government

Taxation, Public good, Inequality and poverty

[ALL] Chapter 9, 10 3 Weeks

#### Unit 4 : Individual decision and interactions

Decision versus strategic interaction, How to think about strategic interactions, Real life examples.

**[DS]** Chapter 1, 2 (upto section 2.5) 2 Weeks

#### • Suggested Readings

[ALL] Acemoglu, D., Laibson, D., & List, J. (2017). *Microeconomics*. Pearson.

[DS] Dixit, A. K., & Skeath, S. (2015). *Games of strategy*: Fourth international student edition. WW Norton & Company.

• Course Assessment: Internal Assessment - 25, Final Examination - 75

Suggested weightage for each unit in the final examination

Unit 1 – 15 marks

Unit 2 – 40 marks

Unit 3 – 15 marks

Unit 4 – 5 marks

This division is flexible and plus/minus 10% of the marks and can be done in each unit, given the total is 75.

Minutes of the meeting to discuss

# **Introductory Mathematical Methods for Economics** (Course No. ECON002)

A committee convened by Prof Sudhir Shah and Dr Soumendu Sarkar, Department of Economics, University of Delhi, invited the faculty in various undergraduate colleges affiliated to the university for deliberation on the above-mentioned course. This meeting was held online on October 27th, 2022, 3:30 PM, *via* Zoom.

The following decisions were made:

• K. Sydsaeter, P. Hammond: *Mathematics for Economic Analysis*, Pearson Education (2002)

would serve as the benchmark for teaching level, material coverage, and examination level for this course.

- The entirety of Chapters 1-9 of this book shall be covered in this semester.
- Examiners shall have wide latitude in deciding the examination for the course. Each Unit of the course shall have 10-50% coverage in the final examination.