

**DEPARTMENT OF ECONOMICS  
DELHI SCHOOL OF ECONOMICS  
UNIVERSITY OF DELHI**

**Minutes of Meeting**

**Subject :** B. A. (Hons) Economics (Courses 02) First Semester (2012)  
**Course :** 02 – Statistical Methods in Economics I  
**Date of Meetings :** Friday, 11<sup>th</sup> May, 2012, 2.00 P.M. and Monday 24<sup>th</sup> September 2012.  
**Venue :** Department of Economics, Delhi School of Economics  
University of Delhi, Delhi – 110 007  
**Chair :** Prof. Rohini Somanathan & Dr. Deepti Goel

There were two meetings held. The decisions regarded the course material and exam structure were taken at the meeting in May, 2012 and were confirmed at the meeting on September 24<sup>th</sup> 2012. The following college faculty attended one or both of the meetings.

**Attended by:**

1. Anita Balani, Hansraj College
2. Poonam Kalra, St. Stephen's College
3. Chandra Goswami, Dyal Singh College
4. Paramjeet Kaur, S.G.G.S.C.C.
5. Shyam Sunder, Kirori Mal College
6. Swati Mehta, Miranda House
7. Bijoyata Yozon, Janki Devi Mahavidalaya
8. Shalini Agarwal, Kalindi College
9. Anjani Kochak, Lady Shri Ram College
10. Neetu Chopra, Miranda House
11. Kopal Gupta, Shri Ram College of Commerce
12. Ashu Taru Deb, College of Vocational Studies
13. Priyanka Bhatia, Shri Ram College of Commerce
14. Nupur Kataria, Kamla Nehru College
15. Anil Kumar, Hindu College
16. Pintu Parui, D.C.A.C.
17. Reshmi Chakraborty, L.S.R. College
18. Kamlesh Aggarwal, S.P.M. College
19. Struti Garg, P.G.D.A.V.
20. Heena Kapoor, S.G.G.S.C.
21. Kamlesh Gupta, I.P. College
22. Shahid Zafar, Shaheed Bhagat Singh College
23. T.M. Thomas, Deshbandhu College
24. Anup Chatterjee, A.R.S.D. College
25. Harish Dhawan, R.L.A. (Evening)

26. Nidhi Gupta, S.R.C.C.

27. Ankur Bhatnagar, Satyawati College

The syllabus for this course is reproduced below for convenience:

## Course Outline

### 1. Introduction and Overview

The distinction between populations and samples and between population parameters and sample statistics. The use of measures of location and variation to describe and summarize data. Population moments and their sample counterparts.

### 2. Elementary Probability Theory

Sample spaces and events. Probability axioms and properties. Counting techniques. Conditional Probability and Bayes' Rule. Independence.

### 3. Random Variables and Probability Distributions

Defining random variables. Probability Distributions. Expected values of random variables and of functions of random variables. Properties of commonly used discrete and continuous distributions (uniform, binomial, normal, Poisson and exponential random variables).

### 4. Random Sampling and Jointly Distributed Random Variables

Density and distribution functions for jointly distributed random variables. Computing expected values, covariance and correlation coefficients.

## Readings:

1. Jay L., Devore. *Probability and Statistics for Engineers*, Cengage Learning, 2010
2. John E., Freund. *Mathematical Statistics*, Prentice Hall, 1992
3. Richard J., Larsen and Morris L., Marx. *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011

## Guidelines for Teaching for the Academic Year, 2012-2013:

The main text to be used is *Probability and Statistics for Engineers* by Jay Devore (Indian edition, 2010). Chapters 1-5 will be covered and students will be responsible for the material in the text and all the exercises with the following exceptions:

A list of pages and topics to be **excluded**:

**Chapter 1**, Overview and Descriptive Statistics: pp. 19-20 (Topic: *Stem and Leaf Displays*) and pp 37-41 (*Boxplots*)

**Chapter 4**, Continuous Random Variables and Probability Distributions: Pages 137-153, (*Gamma, Lognormal, Beta and Weibull distributions*),

**Chapter 5**: Joint Probability Distributions and Random Samples: 166-168 (*More than two random variables*), 188-189.

Other than these changes, the course structure would remain as specified in the syllabus. The statistical tables in the textbook are the ones that should be handed out during the exam and these are also the ones on which numerical problems in the exam will be based. Exercises involving the use of computers can be avoided.

The exam structure will be as follows:

Topic	Marks	# questions
1	10	1 out of 2 questions
2	20	2 out of 3 questions
3	25	One compulsory 5 mark question plus 2 out of 3 other questions
4	20	2 out of 3 questions

**Internal Assessment:** This will carry a total of 25 marks and is to be based on 2 class tests of 10 marks each and 5 marks for attendance in lectures and tutorials.