Minutes of Meeting

Subject   :   Discipline Course I – Second Semester (2013-14)
Course   :   Statistical Methods in Economics - I
Date of Meeting: Wednesday 11th December, 2013 at 11.00 A.M.
Venue   :   Department of Economics, Delhi School of Economics,
                        University of Delhi
Chair   :   Dr. Abhijit Banerji

Attended by :

1. Rimpy - PGDAV
2. Loveleen Gupta – Bharati College
3. Divya Gupta – DRC
4. Anita Balani – HRC
5. Anjani Kochaks – LSR
6. Chandra Goswami – DSC
7. Sonia Goel – Ramjas College
8. Anil Kumar – Hindu College
9. Bijoyata Yonzon – JDMC
10. Rashmi Mittal – DSC (M)
11. Sangya Ranjan – Satyawati (Eve.)
12. Swagat Rout – Sri Aruobindo (E)
13. Anup Chatterjee – ARSD
14. Harish Dhawan – RLA(E)
15. Basanti Kumari Nayak – Satyawati (M)
16. Shweta Nanda - ARSD
17. Pradip – CVS
18. Nupur Kataria – KNC
19. Sunita Meena – Miranda House
20. Santosh Aggarwal – LB College
21. Cherry Arora – MNC(E)
22. Sanjeev Grewal - Stephen's College
23. Poonam Kalra – St. Stephen's College
24. Pragya Atri – ARSD
25. Sumeet Singh Raheja – Shivaji College
26. Ankit Singh – DSC (E)
27. Neetu Chopra – Miranda House
28. Shalini Agarwal – kalindi College
29. VA Rama Raju – Sri Venkateswara

Course Description

This is the first of a two-part sequence on statistical methods. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables. The semester concludes with a discussion of joint distributions.

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.

Reference: Devore Ch 1, except stem & leaf and boxplots

Indicative weightage for Semester exam: 10 marks.

2. Elementary Probability Theory

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

Reference: Devore Ch 2

Indicative weightage for Sem exam: 20 marks.

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, Poisson, and Normal random variables).

Reference: Devore Ch 3 & Ch 4, except: pages 122-126 (Section 3.5), pp165-187 (Sections 4.4, 4.5 and 4.6)

Indicative weightage for Sem exam: 25 marks.

4. Random Sampling and Jointly Distributed Random Variables

Density and distribution functions for jointly distributed random variables; computing expected values; covariance and correlation coefficients.

Reference: Devore Ch 5, except pp 200-202 (more than two rv's) & pp 212-230 (Sections 5.3 and 5.4)

Indicative weightage for Sem exam: 20 marks.

Readings:

1. Jay L. Devore, Probability *and Statistics for Engineering and the Sciences,* Cengage Learning, 8th edition, 2012.

2. Irwin Miller and Marylees Miller, *John E. Freund's Mathematical Statistics with Applications*, Pearson,

7th edition, 2004

Assessment: Each course carries 100 marks of which the end-semester examination is 75 marks and internal assessment is worth 25 marks as per the following norms: 10 marks for one class test and 15 marks for presentations.