

Subject: Statistics

Semester: 1

Paper: MDC

Paper Code: STAMDC-001

Paper Type: T

Credit: 3

Full Marks: 75 (Theory-60, CIA-10, Attendance-05)

Paper Description: Statistical Survey

Statistical Survey	3 credits
Unit 1	15L
Introduction: Definition and scope of Statistics, statistical population, and sample concepts. Data: quantitative and qualitative, attributes, variables, scales of measurement - nominal, ordinal, interval, and ratio. Frequency distribution, Presentation: tabular and graphic, including histogram and ogives. Simple problems only based on the above-mentioned topics.	
Unit 2	15L
Descriptive Statistics: Measure of central tendency; measures of dispersion, moments, and quartiles, a measure of skewness and kurtosis for both grouped and ungrouped data. The simple problem is only based on the topics mentioned above.	
Unit 3	15L
Survey Sampling: Concept of population and sample, complete enumeration versus sampling, sampling, and non-sampling errors. Basic principles of sample survey, simple random sampling with and without replacement, definition and procedure of selecting a sample, estimates of the population mean, total, and proportion, variances of these estimates, estimates of their variances, and sample size determination.	
Suggested Readings	
<ol style="list-style-type: none">1. Goon, Gupta, and Dasgupta: Fundamentals of Statistics, World Press2. Gupta & Kapoor: Fundamentals of Mathematical Statistics, S. Chand3. N G Das: Statistical Methods, The McGraw Hill Companies4. Kapoor J N & Saxena H C: Mathematical Statistics, S Chand	