

SARDAR PATEL UNIVERSITY
B.Com. Semester: I
Syllabus with Effect From: June-2019

Paper Code: UB01DCOM66	Total Credit:3
Title Of Paper: Advanced Statistics – II	

Objective: The objectives will be to achieve a deep understanding of particular statistical methods and to learn to use some advanced tools for analyzing and developing statistical methods.

Unit	Description of Detail	Weighting (%)
I	Permutation and Combination: Basic idea of permutation and combinations with simple examples. Formula for ${}^n P_r$ And ${}^n C_r$, without proof.	25%
II	Probability Definition of Random Experiment, Sample Space, Event, Mutually Exclusive Events, Exhaustive events, Dependent and independent Events, Mathematical And Statistical Definition of probability, Theorems of addition and multiplication law of probability without proof, conditional probability with simple sums.	25%
III	Mathematical Expectation Concept of Mathematical expectation of a discrete random variable with sum and product Of two independent and random variable without proof and its properties with simple sums.	25%
IV	Moments Definition of row and central moments of a discrete random variable up to order four. The relationship of row and central moments without proof and with simple sums.	25%

Basic Text & Reference Books:-

- **S.C Gupta and V. K .Kapoor:** Fundamental of applied statistics, Sultan Chand and sons, New Delhi.
- **Kapoor V.K.:** Business Mathematics, Sultan chand and sons, New Delhi.
- **Parimal Mukhopadhyay:** Mathematical Statistics, Books and allied P. Ltd.
- **Sancheti And Kapoor :** Business Mathematics, Sultan Chand and sons, New Delhi.