Theory-80

Practical/ Sessional -20

Objectives:	The Objective of this paper is to impart knowledge to students in order to improve their Logical Reasoning, Ability and Interpretation, Application of various statistical and Mathematical Tools and Techniques in making logical and scientific decisions in Business Operations.
Unit I:	**Introduction to Statistics: -** (Theory) Meaning, Definition, Importance and Limitations of Statistics, Primary and Secondary Data, Methods of collecting primary data, sources of secondary data. Difference between Primary and Secondary data. Ways of collection of data: a) Complete enumeration b) Sample Method, seriation and Tabulation of statistical data.
Unit II:	**Measures of Central Tendency: -** (Numerical) Introduction, definition, types of averages Mean, Median, and Mode: Computation of above Measures in Discrete series, continuous series, and cumulative Frequency. Distribution. (Less than and More than). Merits and Demerits of Mean, Median and Mode.
Unit III:	**Measures of Dispersion & Skewness: -** (Numerical) Introduction, Definition, Objectives of Measuring Dispersion. Mean Deviation and its coefficient, Standard deviation, its coefficient with its Co- variance. **Skewness :-**Introduction, Definition, Objectives of Skewness, Measures of Skewness: Karl Pearson's Co-efficient of skewness.
Unit IV:	**Determinants: -** (Numerical) Definition, Cramer's Rule Determinant of second order, Determinant of Third Order. Properties of Determinants. Computation of Area of Triangle with the help of determinant. SARRU'S Rule for evaluating the determinant.
Unit V:	**Matrices: -** (Numerical) Meaning, Definition and types of Matrices. Operations of Matrices: Addition and subs traction; properties of addition and subtractions.

Suggested Readings:
1) Statistics: S.P. Gupta (Sultan Chand & Sons New Delhi)
2) Fundamental of Statistics: D. N. Elhance (Kitab Mahal Allahbad)
3) Practical Problems in Statistics: Y.R. Mahajan
4) Statistics: Sancheti and Kapoor
5) Elementary Statistical Methods: Dr. S.P. Gupta, Sultan Chand & Sons.
6) Fundamentals of Statistics: D.N. Elhance, Kitab Mahal.
7) Statistics (Theory, Methods & Application): Dr. D.C. Sancheti, V.K. Kapoor, Sultan Chand & sons