YEAR – II		ASCM301S
SEMESTER – III	BUSINESS STATISTICS	HRS/WEEK – 5
ALLIED		CREDIT – 3

## **OBJECTIVE:**

To motivate the students to apply the statistical techniques in their respective major subjects.

#### UNIT – I

Introduction: Collection of data – Primary data and Secondary data – Different methods of Collecting primary data – Classification and Tabulation of Statistical data – Frequency distribution: Simple and Cumulative – Measures of Central value: Mean, Median, Mode, Geometric Mean and Harmonic Mean.

## UNIT – II

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and their Coefficients – Lorenz Curve – Measures of Skewness: Karl Pearson's and Bowley's methods. Kurtosis.

## UNIT – III

Correlation – Karl Pearson's – Spearman's rank correlation – Probable error – Concurrent deviation – Regression analysis: Simple regression equations.

## UNIT – IV

Index numbers – Aggregative and Relative Index – Chain and Fixed based Index – Cost of living Index – Analysis of Time Series: Least square method (Straight line), Semi average and Moving average – Measurement of Seasonal variations by the method of simple averages.

#### UNIT-V

Statistical Quality control: Control chart, Assignable and Chance Causes of Variation, X and R Charts, p, np charts and C charts.

# Text Books:

- 1. "Business Mathematics and Statistics", Vittal. P. R.
- 2. "Statistical Methods" (32nd edition 2004), Gupta. S. P., Sultan Chand & Sons, New Delhi.
- 3. "Business Statistics", Gupta. S. P., Gupta. P. K. and Manmohan.

## **Reference Books:**

- 1. "Applied General Statistics", Croxton. F. E. & Cowden. D. J.
- 2. "Index Numbers, Applied Statistics" (2nd edition), Mudgett Gupta. O. P. & Ansari. M. A., Kadarnath & Co.
- 3. "Fundamentals of Statistics Volume II" (6th edition 1990), Goon. A. M., Gupta. M. K. and Dass Gupta. B, The World Press Private Ltd., Calcutta.
- 4. "Business Statistics" (1st edition 2008), Bharat Jhunjhunwala, S. Chand & Company Ltd.

"Mathematical Statistics" (1st edition - 2002), Vittal. P. R., Margham Publications,

## Structure of the Question Paper:

## Section A

## Answer All the Questions (10 X 1 = 10 Marks)

# Section B

Answer All the Questions - Internal Choice (5X 5 = 25 Marks)

# Section C

# Answer any Four Questions (4X10 = 40 Marks)

Out of Six Questions the Students are asked to answer any Four.

Note: Each unit Carry equal weightage.