Course Code	Course Title	C	H	I	E	T
17U2KMC4	**Business Statistics**	4	90	25	75	100

Learning Objectives:

- To know the concept of statistics and its applications in business
- To be able to calculate measures of central tendency, measures of dispersion
- To gain working knowledge on correlation and regression
- To acquire skills towards solving problems in time series analysis

Learning Outcomes: Knowledge on Date analysis and presentation of data. Ability to calculate Mean, Median, Mode and Standard Deviation. Ability to predict the future by Regression and Analysis of time series

Unit I: Introduction to Statistics

Definition – Functions - Collection, Classification, Tabulation and Presentation of Data - Frequency Distribution - Graphical and Diagrammatic Presentation – Histogram - Frequency Polygon – Ogive - Bar and Pie Diagram.

Unit II: Measures of Central Tendency

Mean – Meaning – Definition – Arithmetic Mean, Geometric Mean & Harmonic Mean – Combined Mean - Median, Quartiles, Deciles and Percentiles – Mode (Uni and Bi Model) - Measures of Dispersion – Range - Standard Deviation - Combined Standard Deviation - Coefficient of Variation.

Unit III: Correlation and Regression Analysis

Correlation - Meaning – Definition - Types - Measures of Correlations - Karl Pearson's Coefficient of Correlation – Rank Coefficient of Correlation – Concurrent Deviation. Regression Analysis – Meaning - Definition - Regression Lines.

Unit IV: Index Numbers and Analysis of Time series

Index Numbers – Meaning – Types – Definition - Methods - Tests of consistency of Index number (Time reversal & Factor reversal test) - Cost of Living Index – Chain Base – Fixed Base – Base shifting.

Analysis of Time Series – Meaning – Definition - Models - Method of Least Square and Moving Average.

Unit V: Probability

Meaning - Addition - Multiplication – Conditional - Bayes' Theorem - Mathematical Expectation.

The Questions should be asked in the ratio of 80% Problems and 20 % for theory

Text Book

1. RSN. Pillai & Bagavathi, "***Business Statistics***", Eight Edition, 2016, S.Chand & Co Pvt., Ltd., New Delh.

Reference Books

1. S.P. Gupta, ***"Statistical Methods",*** Forty Fourth Edition, 2014, Sultan Chand & Sons, New Delhi.
2. S.C. Gupta & V.K. Kapoor, ***"Fundamentals of Mathematical Statistics",*** 2014, Sultan Chand & Sons, New Delhi.
3. J.K. Sharma, "***Fundamentals of Business Statistics",*** Second Edition, 2014, Vikas Publishing House Pvt., Ltd., Noida.
4. B.M. Aggarwal, ***"Business Mathematics and Statistics Fundamentals",*** Twentieth Edition, 2008, Sultan Chand & Sons, New Delhi.
5. www.icai.org.in, www.icmai.in, www.investopedia.com