JYOTI NIVAS COLLEGE AUTONOMOUS
SYLLABUS FOR 2018 BATCH AND THEREAFTER

Programme: Integarted B.Com M.comSemester: II

STATISTICS FOR BUSINESS DECISION

Course Code: 19IC203   **No. of Hours: 60**

COURSE OBJECTIVES:

- To expose students to various statistical measures used in business.
- To familiarize students with quantitative concepts used in research.
- To provide students basic knowledge of business analytics.

LEARNING OUTCOMES:

- Recognize the importance of value of quantitative thinking, training and approach to problem solving.
- Recognize and appreciate the connections between theory and applications.
- Be able to use statistical reasoning for research projects undertaken later.

UNIT 1:Introduction to Statistics   **06 HRS**

Definition, Collection of Data, Processing, Analysis and interpretation of Data, Classification of Data - Frequency distribution. Graphical presentation using histogram and cumulative frequency curves.

UNIT 2: Analysis of univariate data   **16 HRS**

Measures of central tendency:-Characteristics of a good measure of central Tendency, Arithmetic mean-simple and weighted means. Median and Mode- properties and computation for grouped data. Geometric mean and Harmonic mean

UNIT 3:Measures of dispersion:-   **12 HRS**

 Definition, measures of dispersion-Range, Quartile deviation. Mean deviation and Standard deviation , their relative measures and coefficient of variation.

UNIT 4: Analysis of Bivariate data   **10 HRS**

Correlation-

Definition, Scatter diagram, Karl Pearson's correlation coefficient.Spearman's rank correlation, properties of correlation coefficient and interpretation of correlation coefficient through probable error.Coefficient of Determination.Regression-Linear regression, properties of regression coefficients and their interpretation.

UNIT 5: Applied Statistics   **04 HRS**

Index Numbers- Definition, method of construction. Unweighted and weighted price index numbers- Laspeyre's, Paasche's, Marshall-Edge worth, Drobish- Bowley and Fisher's price index numbers. Cost of living index numbers-steps in construction and computation

UNIT 6:Time series   **06 HRS**

-Definition, components of a time series, methods of measuring trend- moving average and least squares method (for linear equations only).

UNIT 7:Probability   **06 HRS**

Definition – classical, relative frequency, and axiomatic – random experiment, events – elementary , compound , mutually exclusive, collectively exhaustive, complementary, equally likely – simple problems based on combinatorial probability.

SKILL DEVELOPMENT

- Computation of cost of living index of ten items regularly used.
- Collection of data and calculation of measures of central tendency, correlation, regression.
- Collecting data and preparing time series.

REFERENCES:

1. Basic Statistics-B.L Agarwal -New Age International Publishers-Fourth Edition 2006.

2. Fundamentals of Statistics-S.C Gupta-Himalaya Publishing House-Sixth Edition.

3. Business Statistics-ShukIa S.M and Sahai S P-SahityaBhawan publications-2005.

4. Statistical Methods-D. Patri and D.N Patri-Kalyani Publishers- Fourth Edition-2005.

5. Operations research- S D Sharma-Kedarnath Ram nath-lS111 edition-2004

6. Statistics for Management- Levin &rubin- Prentice Hall , India, 7th edition.