

GENERAL

1.1 COURSE TITLE: **Business Statistics**

1.2 COURSE NUMBER: MT5801

1.3 CONTACT HRS: (30 Hours- Teaching, 10 hours- Project) Credits: 08

1.4 SEMESTER -OFFERED: Odd Semester (July-December)

1.5 PREREQUISITE: No

1.6 SYLLABUS COMMITTEE MEMBER: Dr. Sanjay Kumar Kar & Dr. Rohit Bansal

2. OBJECTIVES

- To understand and apply basic concepts of statistics.
- To conduct basic computations of descriptive statistics.
- To apply basic concepts of probability and understand probability distributions.
- To apply principles of estimation and calculate confidence intervals.

3. COURSE CONTENT

Unit I (06 hours)

- Introduction
- Organising and Graphing Data
- Measures of Central Tendency
- Measures of Position
- Measures of Dispersion

Unit II (06 hours)

- Probability
- Discrete Random Variable and their Probability Distributions
- Continuous Random Variable and the Normal Distribution

Unit III (06 hours)

- Sampling Techniques
- Sampling Distributions
- Estimation of Mean and Proportion

Unit IV (08 hours)

- Hypotheses Tests about the Mean and Proportion
- Estimation and Hypothesis Testing: Two Populations
- Chi-Square Tests

Unit V (04 hours)

- Linear Correlation
- Linear Regression
- Multiple Regression

4. READINGS

4.1 TEXT BOOKS:

- Complete Business Statistics: Aczel, Sounderpandian, Saravanan, Joshi, Mc-Graw Hill Education

4.2 REFERENCE BOOKS

- Managerial Statistics: Keller, Cengage Learning.
- Statistics for Management: Levin & Rubin, Pearson Education.
- Introductory Statistics: Weiss, Pearson Education.
- Statistics for Business and Economics: Anderson, Sweeney and Williams; Cengage

5. COURSE OUTCOMES

At the conclusion of this course students will be able to identify appropriate statistical techniques, compute statistics and interpret results for better insights and effective decision making.