INSTITUTE	FACULTY OF MANAGEMENT STUDIES
PROGRAM	BACHELOR OF BUSINESS ADMINISTRATION
SEMESTER	3
COURSE TITLE	DATA ANALYSIS USING SPREADSHEET
COURSE CODE	04OE0007
COURSE CREDITS	3

Course Outcomes: After completion of this course, student will be able to:

1. Acquire a fair degree of proficiency in comprehending statistical data, processing, and analyzing it.
2. Apply various measures of central tendency and measures of dispersion in data analysis.
3. Analyze the relationship between two variables using concepts of correlation and regression and its use in prediction.

Pre-requisite of course: NONE

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
3	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	**Introduction, Collection and Presentation of Data** Need of Data and Data Analysis, Basic Terminology, Data Collection, Types of Variables, Basics of Microsoft Excel (spreadsheet), Tables and Charts for Categorical Data, Organizing Numerical Data, Tables and Charts for Numerical Data, Pivot table and Excel Solver, Use of MS Excel for Graphs and Charts of Data	8
2	**Measures of Location** Measures of Central Tendency: Mean, Median, Mode and Quartiles of Ungrouped and Grouped Data, Numerical examples of Measures of Location using MS Excel	6
3	**Measures of Scale** Measures of Variation and Shape: Range, Inter-quartile Range, Variance, Standard Deviation and Coefficient of Variation of Ungrouped and Grouped Data, Visual Exploration, Exploratory Data Analysis using Five-Number Summary and Box-Whisker Plot, Numerical examples of Measures of Scale using MS Excel	8

Contents : Unit	Topics	Contact Hours
4	**Bivariate Analysis-Correlation** Introduction, Covariance and Coefficient of Correlation (using Karl Pearson's Method), Interpretation of Coefficient of Correlation, Properties of Coefficient of Correlation Numerical examples of Correlation using MS Excel	6
5	**Bivariate Analysis-Regression** Regression Analysis: Introduction, Types of Regression Models, Determining Linear Regression Equations (Estimation), Visual Exploration, Prediction in Regression Analysis Numerical examples of Regression using MS Excel	8
Total Hours		**36**

Textbook :

1 Statistics for Managers using MS Excel, Levine et al, Pearson, 2008

References:

1 Business Statistics, Business Statistics, Naval Bajpai, Pearson, 2014

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Higher order Thinking**
20.00	30.00	25.00	15.00	10.00	0.00

Instructional Method:

1 Theory