

PROGRAM	Bachelors Of Commerce /Bachelors Of Commerce(Hons)
SEMESTER	II
COURSE TITLE	Business Statistics
COURSE CODE	04BC1205
COURSE CREDITS	4
COURSE DURATION	48 Hrs (48 sessions of 60 minutes each)

#### **COURSE OUTCOMES:**

- Acquire a fair degree of proficiency in comprehending statistical data, processing and analyzing it.
- Apply various measures of central tendency and measures of dispersion in data analysis.
- Analyze the relationship between two variables using concepts of correlation and regression and its use in prediction.
- Develop an understanding of the index numbers and their utility in daily life and stock market.
- Analyze and apply the concept of probability and distributions in managerial decision making.

### **Teaching and Examination Scheme**

Teaching Scheme (Hours)		Credits	Internal Marks (50%)		End-Semester Examination (50%)			Total	
Theory	Tutorial	Practical	Credits	IA	CSE	Theory	Practical/Viva	Term Work (TW)	Marks
3	1	0	4	30	20	50	0	0	100

#### **COURSE CONTENTS:**

Unit No	Unit / Sub Unit	Sessions
ı	Data Preparation and Presentation Introduction, Classification of Data , Organizing data using data array, Tabulation of Data ,Graphical Presentation of Data , Types of Diagrams , Exploratory Data Analysis. Use of MS-Excel to create Frequency Distribution and Graphs.	8
II	Measures of Location and Scale Introduction, Mathematical Averages, Geometric Mean, Harmonic Mean Relationship Among AM,GM & HM, Partition Values, Mode, Relationship Between Mean, Median and Mode, Comparison between Measures of Central Tendency, Range; Quartile deviation; Inter Quartile Range; Mean Deviation; Standard Deviation; Variance & Coefficient of Variation; Concept of Skewness & Kurtosis.  Use of MS Excel Statistical function to find descriptive measures.	10



III	Bivariate Analysis Introduction, Significance of Measuring Correlation, Correlation and Causation, Types of Correlation, Methods of Correlation Analysis. Two lines of regression, regression coefficients, prediction.  Use of MS Excel Statistical Function to compute correlation and regression.	10
IV	Construction of Index Numbers Introduction, Definition, Types, Characteristics and Uses of Index numbers; Methods of Construction of Index numbers (Price, Quantity, Value), Unweighted Index numbers, Weighted Index numbers (Laspeyre's, Paasche's, Fisher's, Marshall-Edgeworth, Dorbish-Bowley's Index numbers).	10
V	Probability and Probability Distribution Introduction to Permutation and Combination, Counting Rules ,Concepts of Probability, Definition of Probability, Rules of Probability(Addition and Multiplication). Mathematical Expectation, Binomial Distribution, Normal Distribution – Properties and Applications.	10

# **SUGGESTED READINGS:**

# **Text Books:**

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
T-01	J.K.Sharma	Business Statistics	Vikas Publishing House Pvt. Ltd	4 <sup>th</sup> edition,2014
T-02	N D Vohra	Business Statistics	McGraw Hill Education	1 <sup>st</sup> edition,2012
T-03	R P Hooda	Statistics for Business and Economics	Vikas Publishing House Pvt. Ltd	5 <sup>th</sup> edition,2015

### **Reference Books:**

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
R-01	Sancheti D.C. and Kapoor V.K	Statistics: Theory, Methods & Application	Sultan Chand & Sons	7 <sup>th</sup> .edition,2014
R-02	S.C. Gupta	Fundamentals of Statistics	Himalaya Publishing House	7 <sup>th</sup> .edition,2015
R-03	Beri, G.C	Business Statistics	ТМН	3 <sup>rd</sup> .edition,2009