22BAB01 - STATISTICS FOR MANAGEMENT				
	L	**T**	**P**	**C**
	2	1	0	3

PREREQUISITE : NIL

Course Objective	• To enable the students to have an insight into basic statistical techniques • To determine the outcomes and probabilities for experiments. • To estimate the relationships among variables • To identify the population parameter and test statistic of given scenario. • To enable the students to draw conclusions from the analysis for better decision making.

Course Outcomes The Student will be able to		**Cognitive Level**	**Weightage of COs in End Semester Examination**
CO1	Apply statistical techniques to real-world business problems, such as regression analysis, hypothesis testing	Ap	30%
CO2	Interpret statistical analysis to support and enhance business decision-making processes, enabling informed and strategic management decisions.	Ap	20%
CO3	Analyze the relationship between variables using linear and rank correlation.	An	20%
CO4	Assess proficiency in statistical concepts, including probability, distributions, and statistical inference.	E	20%
CO5	Express statistical results and communicate findings effectively to management	C	10%

UNIT I - INTRODUCTION TO STATISTICS	**(6+3)**

Statistics - Definition, Types. Types of variables -Organizing data - Descriptive Measures: Mean, Median, Mode, Standard Deviation, Mean Deviation.

UNIT II -PROBABILITY	**(6+3)**

Basic Definitions and Rules for Probability - Conditional Probability - Independence of Events - Baye's Theorem. Probability distributions: Binomial, Poisson and Normal distributions.

UNIT III -CORRELATION AND REGRESSION ANALYSIS	**(6+3)**

Linear Correlation, Measures of Correlation, Rank Correlation - Simple Linear Regression - Coefficient of Correlation.

UNIT IV -TESTING OF HYPOTHESIS	**(6+3)**

Hypothesis testing, One Sample and Two Samples test for means of large samples(Z - Test) - One Sample and Two Sample test for means of small samples (t - Test)and ANOVA One and two way.

UNIT V - NON PARAMETRIC TEST	**(6+3)**

Chi-Square Test - Goodness of fit and Independence of Attributes, Rank sum test- Mann-Whitney U test and Kruskal-Wallis Test. One sample run test.

	TOTAL (L:30 , T:15) = 45 PERIODS

REFERENCES:

1. Richard I. Levin, David S. Rubin, MasoodH.Siddiqui, Sanjay Rastogi, "Statistics for Management", Pearson Education, 8th Edition, 2017.
2. Prem. S. Mann, "Introductory Statistics", Wiley Publications, 10th Edition, 2020.
3. T N Srivastava and ShailajaRego, "Statistics for Management", Tata McGraw Hill, 3rd Edition 2017.
4. Ken Black, "Applied Business Statistics", 7th Edition, Wiley India Edition, 2012.
5. David R. Anderson, Dennis J. Sweeney, Thomas A.Williams, Jeffrey D.Camm, James J.Cochran, "Statistics for business and economics", 13th Edition, Thomson (South - Western) Asia, Singapore, 2016.
6. N. D. Vohra, "Business Statistics", Tata McGraw Hill, 2017.

Mapping of Course Outcomes (COs) with Programme Outcomes (POs)					
COs/ POs	PO1	PO 2	PO 3	PO4	PO5
CO1	3			3	
CO 2		2	2		2
CO 3		2			
CO 4	3	3	3	2	
CO 5			2		3
CO(W.A)	3	2.3	2.3	2.5	2.5