

**Subject Code: 1SC1040622**

**Subject Title: Business Mathematics-VIII**

**Course Objective:** This course is designed to enable students to acquire understanding about the Fundamentals of Probability and Correlation & Regression analysis.

Teaching scheme (hours) per week		credit		Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	University Assessment	Cont. Assessment	University Assessment	Cont. Assessment	
2	--	2	--	35	15	--	--	50

Subject Contents			
Unit No.	Topic	Total Hours	Weight (%)
1	<b>Probability :</b> Classical- Statistical (or Empirical)- Axiomatic (Modern) definition of probability, Definitions of event, equally likely, mutually exclusive and exhaustive events, Probability theorems, Statement's of Baye's theorem and its examples, Conditional probability and its examples.	12	50
2	<b>Correlation &amp; Regression analysis :</b> Definition of correlation, positive & negative correlation, Scatter diagram, Carl- Pearson's coefficient of linear correlation, Properties of correlation coefficients and its examples, regression coefficient, properties of regression coefficient and its examples.	12	50

**Course Outcome:**

After successfully completion of the course, the student will be able to ...

- Students will be able to understand the concept of Probability, Correlation & Regression analysis and its application.

**List of References:**

1. Operation Research, by J.K.Sharma.
2. Business Statistics, by Bharat Jhunjunwala, S. Chand Prakashan.
3. Business Statistics, by R.S. Bhardwaj
4. Statistics (Chapter – 18 & 19) by, R.S.N.Pillai & V. Bagavathi,S. Chand & Company, New- Delhi