



Karmaveer Bhaurao Patil University, Satara
(A State Public University Est. u/s 3(6) of MPUA 2016)
Faculty of Commerce and Management

Dhananjayrao Gadgil College of Commerce, Satara

Board of Studies in Statistics & Mathematics

Programme: B.Com(Business Studies) **Semester - IV**

Type : VSC **Marks:** 50

Credits : 2 **From:** A. Y. 2025-26

Name of the Course: Statistical Techniques Paper –II

Course Objectives:

1. To establish relationship between two or more variables and to predict the value by regression analysis & draw Scatter diagram.
2. To interpret value of correlation coefficient.

Course Outcomes:

The students will acquire;

1. Knowledge of plotting Scatter diagram & univariate, bivariate data analysis.
2. Knowledge about Correlation and Regression analysis.

Module	Title and Contents	Hrs
Module -1:	<p>Module -1: Correlation</p> <p>1.1 Concept of bivariate data and correlation,</p> <p>1.2 Types of correlation (Positive, Negative, Linear and Non-linear).</p> <p>1.3 Methods of studying correlation: Scatter Diagram, Karl Pearson's coefficient of correlation (r), Spearman's Rank correlation coefficient (R), Interpretation of correlation coefficient,</p> <p>1.4 Real life examples.</p>	15
Module -2:	<p>Module -2: Regression:</p> <p>2.1 Concept of Regression</p> <p>2.2 Simple linear Regression, Equation of lines of regression, Estimation of Regression coefficients, Interpretation of regression coefficients, Properties of regression coefficients (without proof).</p> <p>2.3 Concept of Residuals, Residual sum of squares & its use.</p> <p>2.4 Graph of actual Vs Predicted value & its interpretation, Numerical examples.</p>	15

Reference Books:-

1. B. M. Agrawal, Essentials of Business Statistics, Ane Books Pvt. Ltd.2010
2. B. M. Agrawal, Business Mathematics and Business Statistics, Ane Books Pvt. Ltd.2009
3. R.S.N. Pillai and Bagavathi, Practical Statistics, S. Chand Publications.1987
4. S.P.Gupta, Statistical Methods, Sultan Chand & Sons 2021
5. C.B.Gupta, Introduction to Statistics, Vikas Publishing House Pvt.Ltd.2004
6. H.C.Saxena and J.N.Kapur, Mathematical Statistics. S. Chand Publications 2010
7. G. V. Kumbhojkar, Business Statistics for B.Com. Part-II, Sem-III, Phadke Prakashan
8. S. S. Desai, Business Statistics, for B.Com. Part-II, Sem-III

Note: Use of nonprogrammable calculator is allowed.

Evaluation Pattern:

Total Marks: 50

Internal Continuous Evaluation: 20 Marks

- Home Assignment/Tutorial - 10 marks
- Unit test/Seminar – 10 marks

End Semester Examination: 30 Marks

Each question for 10 Marks

- Question -1 MCQ 5 Out of 6 of 2 marks each
- Question -2 Long answer question with example
or
- Question -2 Long answer question with example
- Question -3 Long answer question with example
or
- Question -3 Long answer question with example