PDEA'S

MamasahebMohol College, Paud Road, Pune – 38

Computer Science Department

Course Name:CSST 121: Methods of Applied Statistics, SEMESTER- II, PAPER I-(2 Credits, 40 lectures)

Course Outcomes: (CO 121)

Learning Outcomes	**Teaching learning strategies /Activities**	**Assessment tasks/tools**
Students will be able **CO121.1** To understand relationship between data elements.	Lecture method, Problem solving sessions,	TestExam
CO121.2 To apply regression technique for prediction.	Lecture method , problem solving sessions	Test Exam
CO121.3 To understand relationship between more than two variables.	Lecture method , problem solving sessions	Test Exam
CO121.4 To understand the components of time series.	Lecture method , problem solving sessions	Test Exam

Course Specific Outcomes(CSO): Methods of Applied Statistics

Course: Methods of Applied Statistics	Course Specific Outcomes CSO	Methodology	Reference Book	No.of Lectures
Correlation (for bivariate rawdata): Bivariate data, Scatter diagram. Correlation, Positive Correlation, Negative Correlation, Karl Pearson's coefficient of correlation (r), interpretation of r, Numerical Problems.	To understand relationship between data elements. To know the types of correlation.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	10
Regression (for ungrouped data): Regression,LinearRegression..Fitting of straight line using least square method. Properties of regression coefficients.Non Linear regression models.Numerical problems.	Apply regression technique for prediction.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	12
Multiple and Partial Correlation and Regression (for trivariate data): Yule's notation and concept of multiple regressions. Fitting of multiple regression plane. Partial regression coefficient, interpretation. Multiple correlation coefficient, Partial correlation coefficient.	To understand relationship between more than two variables. Analyze regression plane.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	10
Time Series: Components of Time Series.Additive and Multiplicative models.Methods of estimating trend: moving average method, least squares method and exponential smoothing method. Elimination of trend using additive and multiplicative models.Simple time series models, Numerical problems.	To understand the components of time series. Use different methods of time series for calculating trend.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	8