Devchand College, Arjunnagar

Statistics

Course Outcomes (C.O.) after completion of following courses of Statistics as per existing syllabus of Shivaji University:

Class (Semester)	Course Code	Course Title	Course Outcome (C.O.)
B. Sc. I (I)	DSC – 7A	DESCRIPTIVE STATISTICS – I	 Understanding of statistical population, sample. Data collection and its representation by tables, diagrams and graphs. Understanding the concept of central tendency, dispersion, skewness and kurtosis of a variable. Measuring to these concepts, its computations and interpretations of these values. Understanding the concept of association between attributes. Measuring of association, its computations and interpretations of these values.
	DSC – 8A	ELEMENTARY PROBABILITY THEORY	 Understanding the concept of uncertainty. Measuring the uncertainty by using probability measures. Understanding the concept of conditional occurrence of uncertain events. Measuring the conditional occurrence of uncertain events and its interpretations.
B. Sc. I (II)	DSC – 7B	DESCRIPTIVE STATISTICS – II	 Understanding the concept of bivariate data. Measuring correlation between two variables and interpretation of its values. Establishing the linear regression (if exists) between dependent and independent variables. Estimating value of dependent variable for given value of independent variable. Understanding the concept of rise or fall in prices or consumption or values of commodities in current year with respect to base year. Measuring rise or fall in above by using various indices and their interpretations.
	DSC – 8B	DISCRETE PROBABILITY DISTRIBUTIONS	 Understanding the concept of discrete random variable on finite sample space and its probability distribution. Study and application of some standard discrete distributions in real life situations. Concept of expectation and variation of random variable and its computation. Understanding the concept of discrete bivariate random variable on finite sample space and its joint probability distribution.

			5. Concept of independence, covariance, correlation between two discrete random variables. Its computation and interpretations.
B. Sc. II (III)	DSC – 7C	PROBABILITY DISTRIBUTIONS–I	 Study and applications of some standard distributions defined on countable infinite support. Understanding the difference between discrete and continuous distributions. Understanding the concept of continuous bivariate random variable and its joint probability density function. Concept of independence, covariance, correlation between two continuous random variables. Its computation and interpretations. Obtaining conditional and marginal probability distributions. Concept of transformation of univariate and bivariate continuous random variables. Obtaining probability densities of transformed random variables.
	DSC – 8C	STATISTICAL METHODS-I	 Understanding the concept of multiple regression plane. Estimating regression plane of dependent variable on two or more independent variables. Estimating value of dependent variable and for given values of independent variables. Concept of multiple correlation of one variable on the remaining, its computation and interpretation. Concept of partial correlation between two variables, its computation and interpretation. Understanding the basics of sample survey. Awareness about vital statistics. Concept of mortality rate, fertility rate and population growth rates. Its computation and interpretations.
B. Sc. II (IV)	DSC – 7D	PROBABILITY DISTRIBUTIONS-II	 Study and applications of some standard continuous probability distributions in real life situations. Obtaining various measures for above distributions. Knowing interrelationship between above distributions. Applications of some sampling distributions in real life situations for testing independence of attributes, goodness of fit test for given distribution, equality of means and variances of two populations.
	DSC – 8D	STATISTICAL METHODS-II	 Understanding the concept of time series, its components. Estimation of secular trend and seasonal index from time series data. Understanding the concept of chance and assignable cause in production process. Application of Statistical Quality Control techniques such as control charts for variables and attributes to monitor assignable cause in a process.

			5. Understanding the concept of testing of statistical hypothesis. Its application for the small sample tests and large sample tests in various situations.
B. Com. II (III)	-	BUSINESS STATISTICS (PAPER-I)	 Understanding of statistical population, sample. Data collection and its representation by tables, diagrams and graphs. Awareness of using statistical techniques in business. Understanding the concept of central tendency, dispersion of a variable. Measuring to these concepts, its computations and interpretations of these values. Understanding the concept of bivariate data. Measuring correlation between two variables and interpretation of its values. Obtaining the linear regression between dependent and independent variables. Estimating value of dependent variable for given value of independent variable.
B. Com. II (IV)	-	BUSINESS STATISTICS (PAPER-II)	 Understanding the concept of uncertainty and its measurement. Understanding the concept of conditional occurrence of uncertain events. Its measurement and interpretations. Understanding the concept of discrete random variable and application of binomial distribution in real life situations. Understanding the concept of continuous random variable and application of normal distribution in real life situations. Understanding the concept of time series, its components. Estimation of secular trend and seasonal index from time series data. Understanding the concept of rise or fall in prices or consumption or values of commodities in current year with respect to base year. Measuring rise or fall in these entities by using various indices and their interpretations.

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