

PDEA'S

## **MamasahebMohol College, PaudRoad, Pune – 38**

### **Computer Science Department**

**Course Name:CSST 111:Descriptive Statistics I, SEMESTER- I, PAPER I-(2 Credits, 40 lectures)**

#### **Course Outcomes: (CO 111)**

<b>Learning Outcomes</b>	<b>Teaching learning strategies /Activities</b>	<b>Assessment tasks/tools</b>
Students will be able <b>CO111.1</b> To understand basic tools and methods required for data analysis.	Lecture method, Problem solving sessions,	Assignment ,TestExam
<b>CO111.2</b> To understand graphical methods for data representation.	Lecture method	Assignment ,Test Exam
<b>CO111.3</b> Apply statistical methods in the field of data mining.	Lecture method , problem solving sessions	Test Exam
<b>CO111.4</b> To know concepts of independence and association of attributes.	Lecture method	TestExam

## Course Specific Outcomes (CSO): Descriptive Statistics I

Course: Descriptive Statistics I	Course Specific Outcomes CSO	Methodology	Reference Book	No.of Lectures
<b>Data condensation and Graphical methods:</b> histogram, stem and leaf chart, Ogives.	To understand basic terms about the statistics. To understand graphical methods for data representation	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	9
<b>Review/Revision of Descriptive Statistics:</b> Measures of Central tendency, Measures of Dispersion	To understand basic concept about central tendency. To understand basic concept about dispersion. To develop knowledge about partition values.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	14
<b>Moments, Skewness and Kurtosis:</b> Raw and Central moments, Relation between raw and central moments upto fourth order, of Measures of skewness- Pearson's measure, Bowley's measure, $\beta_1$ , $\gamma_1$ . type of kurtosis: leptokurtic, platykurtic and mesokurtic. Numerical problems related to real life situations. Numerical problems.	To understand various types of moment. To understand symmetry of the data. To know peakedness and flatness of the data.	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	10
<b>Theory of Attributes :</b> Attributes: Concept of a Likert scale, classification, notion of manifold classification, dichotomy, class- frequency, order of a class, positive class frequency, negative class frequency, ultimate class frequency, relationship among different class frequencies (up to two attributes), Consistency of data upto 2 attributes. Concepts of independence and association of two attributes. Yule's coefficient of association (Q), $-1 \leq Q \leq 1$ , interpretation.	To know concepts of independence and association of attributes	Constructive	Fundamentals of Applied Statistics Gupta S. C. and Kapoor V. K.	7