

**SRI VENKATESWARA UNIVERSITY : TIRUPATI**  
**STATISTICS SYLLABUS ( I YEAR)**  
**Semester – II (CBCS With Non -Maths Combination BA)**  
**Paper – II : Descriptive Statistics**

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**UNIT - I**

Statistics :Definition and its applications to various disciplines, Scope, Limitation, Collection of Data: Primary and Secondary data, Methods of collection of primary data, Sources of secondary data, Conduct of statistical inquiry, Preparation of questionnaire and schedule, Editing of primary and secondary data.

**UNIT - II**

Classification: Characteristics, types of classification of data, Frequency distribution, Tabulation: Objectives, Parts of tabulation, Rules of tabulation, Types of Tabulation: simple, complex and manifold tables.

**UNIT - III**

Diagrammatic Presentation: Advantages and Disadvantages, One dimensional Diagrams: Simple, Sub Divided, Multiple, Percentage bar diagrams, Two dimensional diagrams: Square, Rectangle and Circle or Pie diagrams. Graphic Presentation: Histogram, frequency polygon, frequency curve, Ogive curves.

**UNIT - IV**

Measures of Central tendency: Characteristics of good average, Various Measures: Arithmetic Mean(AM) and properties, Geometric Mean(GM), Harmonic Mean(HM), Median and Mode with their merits and demerits, Graphical location of median and mode, Weighted averages, Simple problems

**UNIT - V**

Measures of Dispersion: Characteristics of good measures of dispersion: Various Measures: Range, Quartile Deviation(Q.D), Mean Deviation(M.D), Standard Deviation(S.D) and properties, Coefficient of variation, Lorenz Curve, Simple problems.

**Reference Books:**

1. Fundamentals of mathematical statistics: S.C.Guptha and V.K. Kapoor
2. Outlines of statistics, Vol. II: Goon Guptha, M.K.Guptha and Das Guptha B
3. Introduction to mathematical Statistics : Hoel P.G
4. Random variable and Probability Distribution: B.A./B.Sc., I year statistics- Telugu Academy
5. Business Statistics : R.S.Bhardwaj
6. Statistics Made Simple Do it yourself on PC By K.V.S. Sarma
7. Applied Statistics with Microsoft Excel By Gerald Keller

## **Practical Paper – II : Descriptive Statistics**

1. Construction of Simple Bar Diagram
2. Construction of Sub divided Bar Diagram
3. Construction of Multiple Bar Diagram
4. Construction of Percentage Bar Diagram
5. Construction of Pie Chart
6. Construction of Histogram, Frequency polygon and Frequency Curve
7. Construction of Histogram and determination of mode
8. Construction of Ogive curves and determination of median
9. Computation of mean, median and mode of frequency distribution
10. Computation of HM, GM of frequency distribution
11. Computation of Quartile Deviation
12. Computation of mean deviation
13. Computation of Standard deviation for un grouped data
14. Computation of Standard deviation for grouped data
14. Computation of Coefficient of variation for un grouped data
15. Computation of Coefficient of variation for grouped data

**Note :** The above practical are to be done using M S Excel and SPSS Package where ever it is possible

THREE YEAR B.A. DEGREE EXAMINATION  
**CBCS - SECOND SEMESTER**  
Part - II - STATISTICS (NM)  
Paper II : DESCRIPTIVE STATISTICS  
New syllabus w.e.f. 2015 - 16  
MODEL PAPER

Time : 3 Hours

Max Marks : 75

**PART - A**

Answer any **FIVE** of the following questions. Each question carries **5** marks

**5X5 = 25 Marks**

1. Define Statistics and explain the characteristics of the statistics.
2. Explain the main sources of secondary data.
3. What is tabulation. Explain the various parts of the table.
4. Explain the construction of Histogram and Frequency Polygon.
5. Explain the construction of Pie diagram.
6. Define Geometric Mean and write its merits and demerits.
7. Define Dispersion and its various measures
8. Define standard deviation and coefficient of variation.

**PART - B**

Answer **ONE** question from each unit. Each question carries 10 marks.

**5x10 = 50 Marks**

**UNIT - I**

9. What is primary data? State various methods of collecting primary data and discuss their relative measures.

(OR)

10. Discuss the Scope of statistics. Explain that uses of statistics in the field of business and economics.

**UNIT - II**

11. Classify the following data by taking class interval such that their mid - values are 17, 22, 27, 32 and so on :

30, 42, 30, 54, 40, 48, 15, 17, 51, 42, 25, 41, 30, 27, 42, 36, 28, 26, 37, 54, 44, 31, 36, 40, 36, 22, 30, 31, 19, 48, 16, 42, 32, 21, 22, 46, 33, 41, 21.

(OR)

12. What is classification and explain different types of classification? What are the uses of tabulation.

### UNIT – III

13. Discuss the various methods of diagrammatic representation of data.

(OR)

14. Represent less than ogive and more than ogive curves of the following data

Class interval	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	10	25	30	50	40	30	15

### UNIT – IV

15. Compute median for the following data

Class Interval	10-50	50-100	100-150	150-200	200-250	250-300	300-350
Frequency	7	16	31	48	26	14	8

(OR)

16. The mean marks got by 300 students in the subject statistics are 45. The mean of the top of them was found to be 70 and mean of the 100 was 20. What is the mean of the remaining 100 students.

### UNIT – V

17. Compute Q D from the following data

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	16	22	30	24	12	6

(OR)

18. Calculate S D and coefficient of variation for the following data

Class Interval	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
Frequency	18	32	50	75	125	150	100	90	50	20