TB251423W

Reg. No :.....

Name :.....

BACHELOR'S DEGREE EXAMINATION, OCTOBER 2025

2025 ADMISSIONS REGULAR

SEMESTER I - MULTI-DISCIPLINARY COURSES (MDC) (STATISTICS)

ST1MDC01B24 - Basics of Statistics

Time : 1 Hours | Maximum Marks : 35

Part A

Answer any 3 questions from the bunch of CO1. Each question carries 2 mark. (2x3=6)

1. Interpret the concept of population and sample with one example. [CO1,Understand]
2. Differentiate between stratified sampling and cluster sampling [CO1,Understand]
3. Classify the following as qualitative or quantitative:
   a) Blood group of a patient
   b) Age of a person [CO1,Understand]
4. Contrast nominal and ordinal scales in terms of measurement [CO1,Understand]

Part A

Answer any 3 questions from the bunch of CO2. Each question carries 2 mark. (2x3=6)

5. Define a histogram. [CO2,Remember]
6. State what a pie chart represents [CO2,Remember]
7. Determine the angles for a pie chart from data: 50, 100, 150, 100. [CO2,Apply]
8. Classify the following into discrete data representation and continuous data representation: Bar chart, Histogram, Frequency polygon, Pie chart. [CO2,Analyse]

Part A

Answer any 4 questions from the bunch of CO3. Each question carries 2 mark. (2x4=8)

9. Compare mean deviation and standard deviation as measure of dispersion. [CO3,Analyse]
10. If mean=20 and standard deviation =12,compute the coefficient of variation. [CO3,Apply]
11. Explain why standard deviation considered better than range as a measure of dispersion? [CO3,Analyse]
12. Compute the median of first five prime numbers. [CO3,Apply]
13. Compute the sum of marks if mean marks of 15 students is 30? [CO3,Apply]

Part B

Answer any 1 question from the bunch of CO1. Each question carries 5 mark. (5x1=5)

14. Explain the importance of statistics in day to day life [CO1,Analyse]
15. Compare and contrast between census and ssampling [CO1,Evaluate]

Part B

Answer any 1 question from the bunch of CO2. Each question carries 5 mark. (5x1=5)

16. The marks obtained by 100 students in a test are given below:

Marks	0-10	10-20	20-30	30-40	40-50	50-60
Number of Students	5	10	25	30	20	10

Draw the less than ogive and more than ogive for the given data on the same graph.and determine the median marks.

[CO2,Apply]

17. The distribution of students in a school according to their favorite sport is given below. Represent the data using a **pie chart.**

Sport	**Number of Students**
Cricket	60
Football	40
Basketball	20
Hockey	30
Volleyball	50

[CO2,Apply]

Part B

Answer any 1 question from the bunch of CO3. Each question carries 5 mark. **(5x1=5)**

18. List the properties of a good measure of central tendency. [CO3,Understand]

19. Compute median and mode ,

Class	: 0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	: 8	12	20	23	18	7	2

[CO3,Apply]