TB25177TO

Reg. No :.....

Name :.....

BACHELOR'S DEGREE EXAMINATION, OCTOBER 2025

2025 ADMISSIONS REGULAR

SEMESTER I - MINOR - S (STATISTICS)

ST1DSCB101B24 - Basic Statistics

Time : 1.5 hours

Maximum Marks : 50

Part A

Answer all questions. Each question carries 1 mark. (1x10=10)

1. Distinguish between Primary data and Secondary data. [CO1,Understand]
2. Cite any one use of Statistics in Economics. [CO1,Understand]
3. Define Primary data? [CO1,Remember]
4. Estimate the class width of the class interval 10--20 [CO2,Understand]
5. Define classification? [CO2,Remember]
6. Define a frequency table? [CO2,Remember]
7. Compute the harmonic mean of 4, 5, 20. [CO3,Apply]
8. Define mode. [CO3,Remember]
9. Compute Q2 (second quartile) of first 5 prime numbers [CO3,Apply]
10. Write the formula of mean deviation about median [CO4,Apply]

Part B

Answer any 3 questions from the bunch of CO1. Each question carries 1 mark. (3x1=3)

11. Justify the use of sampling in large-scale survey [CO1,Evaluate]
12. Evaluate the importance of secondary data in business research? [CO1,Evaluate]
13. Differentiate between variables and attributes with examples from real-life data? [CO1,Apply]

Part B

Answer any 2 questions from the bunch of CO2. Each question carries 3 mark. (3x2=10)

14. Explain the usefulness of diagramatic representation of data ? [CO2,Apply]
15. The following are the marks (out of 100) obtained by by 50 students of MA131 in Semester II 2003 Examination.

55	54	76	70	77	50	84	66	80	61
62	64	80	85	78	42	72	63	85	50
72	53	54	76	90	66	85	82	79	83
78	55	89	80	72	74	74	54	54	54
81	86	58	72	92	76	38	85	69	82

Construct a grouped frequency distribution.Use classes 30--39,40--49,50--59,etc

16. Represent the following frequency table by Histogram. [CO2,Apply]

Marks	No. of students
10-15	5
15-20	20
20-25	47
25-30	38
30-35	10

[CO2,Apply]

Part B

Answer any 2 questions from the bunch of CO3. Each question carries 5 mark. **(5x2=10)**

17. The marks of students are distributed as follows. If the **mode is 65, determine the missing frequency.**

Marks	40-50	50-60	60-70	-70-80	80-90
Number of students	8	?	20	12	5

[CO3,Apply]

18. Define measure of central tendency and partition values [CO3,Remember]

19. The number of goals scored by 50 players in a football season is as follows. **Calculate the median number of goals.**

Goals Scored	0	1	2	3	4	5
Players	6	10	12	8	9	5

[CO3,Apply]

Part C

Answer any 1 question from the bunch of CO4. Each question carries 10 mark. **(10x1=10)**

20. The life (in hours) of electric bulbs produced in two factories is given:

Factory X

Life(in hrs)	300-400	400-500	500-600	600-700	700-800
No.of bulbs	5	10	15	10	5

Factory Y

Life(in hrs)	300-400	400-500	500-600	600-700	700-800
No.of bulbs	6	8	16	12	4

Compute the **CV** and decide which factory's bulbs are more reliable

[CO4,Apply]

21. The monthly expenses of families in two towns are given:

Town A

Expenses (₹)	0-1000	1000-2000	2000-3000	3000-4000	4000-5000
No. of Families	6	8	10	4	2

Town B

Expenses (₹)	0-1000	1000-2000	2000-3000	3000-4000	4000-5000
No. of Families	5	7	12	6	3

a.)Compute the **QD and Coefficient of QD** for both towns.

b.)Conclude which town has more uniformity in expenses

[CO4,Apply]