QP CODE: D1BST2402

Name: .....
Reg.No.: .....

FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024

MINOR

STA1MN105 DESCRIPTIVE STATISTICS

Time : 2 Hrs **Maximum Marks : 70**

BL - Bloom's Taxonomy Level (1 to 6) CO - Course Outcome

Section A

Ceiling Marks : 24

Answer all questions. Each carries 3 marks.

No.	Question	M	BL	CO
1.	Explain Qualitative and Quantitative data using suitable example.	3	2	CO1
2.	State the significance of a sample in statistics.	3	4	CO1
3.	Describe the key features of a bar chart.	3	1	CO2
4.	Find the median of the following data. 10,12,8,16,26,28,32,21,16	3	3	CO3
5.	Find the median for the following distribution. **Class** 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 **Frequency** 8 | 15 | 21 | 42 | 18 | 12	3	6	CO3
6.	Write two specific uses of Geometric mean.	3	2	CO3
7.	Calculate geometric mean for the following items. 135,129,170.138,156,135,149,150	3	3	CO3
8.	List any three characteristics of an ideal measure of dispersion.	3	1	CO4
9.	Define the following. a).Range b).Quartile deviation c).Mean deviation	3	2	CO3 CO4
10.	If the mean and coefficient of variation of a data are 15 and 48 respectively, then find the value of standard deviation.	3	4	CO4

Section B

Ceiling Marks : 36

Answer all questions. Each question carries 6 marks.

No.	Question	M	BL	CO
11.	Define primary data and different methods of collecting primary data	6	2	CO1
12.	Define the following. a).class limits b).class mark c).working class	6	4	CO1

13. Draw a more than and less than ogive for — 6 | 6 | CO2

class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	8	20	34	48	24	36	22

the following data.

14. Present the following data in multiple bars .The following table shows the results of statistics examination in 2005,2006 and 2007. — 6 | 6 | CO2

Year	I class	II class	III class	Failed
2005	2,000	4,000	5,000	3,000
2006	2,500	6,000	3,000	2,300
2007	3,000	6,000	7,000	1,800

15. Calculate the mean for the following frequency distribution. — 6 | 3 | CO3

class interval	0-8	8-16	16-24	24-32	32-40	40-48
frequency	8	7	16	24	15	7

16. A class consists of 50 students, out of which 30 are girls. The mean of marks scored by girls in a test is 73 , and that of boys is 71. Determine the mean score of the whole class. — 6 | 5 | CO3

17. Describe the merits and demerits of harmonic mean and geometric mean. — 6 | 2 | CO3

18. Calculate the standard deviation from the following data. — 6 | 3 | CO4

Marks	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No.of student	5	7	10	15	14	20	11	9

Section C

Answer any 1 question. Each carries 10 marks. (1x10=10 marks)

No.	Question	M	BL	CO

19. Draw a histogram from the following data and locate the mode from the histogram. — 10 | 5 | CO1 CO2

Mid value	18	25	32	39	461
Frequency	10	15	40	30	16

20. Find Q1,Q2 and Q3 for the following data. — 10 | 3 | CO4

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No.of students	7	15	22	35	48	22	16

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