QP CODE: D1BST2401

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

FIRST SEMESTER FYUGP EXAMINATION NOVEMBER 2024

MINOR

STA1MN101 DESCRIPTIVE STATISTICS FOR DATA SCIENCE

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.	What is nominal data and ordinal data?Give an example for each.	3	1	CO1
2.	Differentiate between Questionnaire method and schedule method.	3	4	CO1 CO2
3.	What is pie diagram?What are the limitations of pie diagram?	3	2	CO3
4.	Distinguish between simple and multiple bar diagrams.	3	4	CO3
5.	Define Mean deviation.	3	2	CO4
6.	Define skewness of a distribution. Give any two measures of skewness in common use.	3	2	CO4
7.	Given Q1 = 59.46, Q3 = 65.46, median = 62.50. Calculate coefficient of skewness.	3	4	CO4
8.	Define statistical definition of probability.	3	2	CO5
9.	What is mean by sample space? Give an example.	3	3	CO5
10.	State Bayes theorem.	3	2	CO5

Section B

Ceiling Marks : 36

Answer all questions. Each question carries 6 marks.

11. What is meant by questionnaire?How is it prepared? — M: 6, BL: 5, CO: CO1 CO2

12. Draw a pie diagram to represent the distributions of a certain blood group'O' among Gypsies,Indians and Hungarians. — M: 6, BL: 6, CO: CO3

Blood group'O'	Gypsies	Indians	Hungarians	Total
	343	313	344	1000

13. For the following distribution find mode. — M: 6, BL: 4, CO: CO4

Class	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
Frequency	5	8	7	12	28	20	10	10

14. Calculate median for the data given below: — M: 6, BL: 6, CO: CO4

Class	0 - 6	7 - 13	14 - 20	21 - 27	28 - 34	35 - 41
Frequency	18	11	8	15	6	2

15. Find Pearson's coefficient of skewness from the following data. — M: 6, BL: 4, CO: CO4

Size	8	10	15	22	28	34	40
f	6	9	10	20	25	10	5

16.	Define the term with example (i) Mutually exclusive events. (ii) Equally likely events. (iii) Exhaustive events.	6	2	CO5
17.	Define pair wise and mutual independence .Give an example of three events which are pair wise independent but not mutually independent.	6	2	CO5
18.	If A and B are two independent events then prove that (i) A and B^c are independent. (ii) A^c and B are independent. (iii) A^c and B^c are independent.	6	4	CO5

Section C

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

No.	Question	M	BL	CO
19.	Compute MD about mean and SD from the following data:	10	6	CO4
20.	State and prove Bayes theorem.	10	3	CO5

Class	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45
Frequency	8	28	32	11	15	6

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