

(4)

TMC-105

asked, "how many textbooks do you own?" Their responses, were : 0, 0, 2, 5, 8, 8, 8, 9, 9, 10, 10, 10, 11, 12, 12, 12, 14, 15, 20, and 25. (CO2)

5. (a) From the given data find the regression coefficients X on Y : (CO2)

X	Y
1	9
2	8
3	10
4	12
5	11
6	13
7	14

OR

- (b) Discuss the various methods of collecting Primary Data in Statistics. (CO1)

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Roll No. ....

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M. C. A. (FIRST SEMESTER)

MID SEMESTER

EXAMINATION, Jan., 2023

STATISTICAL DATA ANALYSIS WITH R

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) Discuss the regression analysis and where it is used. (CO2)

OR

- (b) Find median from the following data : (CO1)

Class	Frequency
5—10	11
10—15	20
15—20	35
20—25	20
25—30	8
30—35	6

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2. (a) (i) Find the probability that in the leap year there is 53 Mondays. (CO1)
- (ii) A bag contains 5 red marbles, 7 black marbles and 3 white marbles. One marble is taken out from the box at random. What is the probability that the marble taken out will be black or white. (CO1)

OR

- (b) Calculate the Karl Pearson's correlation for the given data : (CO1)

Marks in Maths	Marks in Statistics
39	47
65	53
62	58
90	86
82	62
75	68
25	60
98	91
36	51
78	84

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3. (a) Discuss the different partition values of data analysis with example. (CO2)

OR

- (b) Draw a pie chart for the following expenditure : (CO2)

Areas	Expenditure
Health	3,200
Infrastructure	1,600
Road safety	1,500
Miscellaneous	600

4. (a) Fit a binomial distribution to the following data : (CO2)

X	F
0	28
1	62
2	46
3	10
4	4

OR

- (b) A survey was given to a random sample of 20 sophomore college students. They were

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