

MS(QMS) First Year
First semester – Statistics for Decision Making 1

Duraion : 2 Hr.s

Mid-Semester Exam

Date: 21st September 2022

Note: Answer as much as you can. Maximum you can score is 50.
Use of calculator, RMMR Tables allowed.

1. The following data gives the scores obtained by students in the final MBA exam. :

71	87	82	64	72	75	91	69
76	79	65	68	80	73	85	71
70	81	54	62	81	84	77	73
82	74	74	73	89	72	81	65
74	58	64	68	73	82	69	71

Construct the following using the above data:

- a) Dot Plot
- b) Histogram, and
- c) Box and Whisker Plot

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2. A firm, primarily engaged in sales, gives a training to its newly recruited Sales Trainees, and then conducts a test, before they are sent to the field to actually sale the products.

The company was interested to find out whether there was any relationship between the Test Scores (T) of the trainees, and the actual no. of products they could sell in the market (S).

The data on the same is given below:

- a) Plot a Scatter Diagram, and offer your comments.
- b) Find out the Regression Line.
- c) Find out the value of R-square.
- d) Using the Regression Line, Estimate that, if a Trainee Mr. Sam gets a score of 41 in the test, what is the likely sale the company can expect from him.

Salesperson No.	Test Score (T)	No. of Units Sold (S)
1	26	95
2	37	140
3	24	85
4	45	180
5	40	175
6	34	150
7	26	100
8	50	195
9	28	115
10	30	136

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3. a) Using the Random Number tables in RMMR Tables, Generate 20 Random Fractions (6-digitd).

- b) Using the above fractions, Generate 20 Random samples from a Normal Distribution with Mean 170 and a S.D. of 6.

[15]

4. Illustrate different ways of presenting Statistical Data

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