

MS(QMS) Mid-Semester Examination

Statistics for Decision Making - 1

Date: 13 September 2016

Time: 2 Hr.s

Note: Answer as much as you can. Maximum you can score is 50

1.

Following data of 25 companies relating to rate of dividend per share were collected randomly from the Ahmedabad stock exchange list. Construct a frequency distribution and a relative frequency distribution.

15, 35, 20, 10, 5, 15, 20, 15, 12, 13, 15, 14, 10
8, 10, 6, 8, 12, 11, 10, 40, 15, 12, 13, 15

Construct the following using the above data:

- a) Dot Plot
- b) Histogram, &
- c) Box Plot

[15]

2. For the data in Problem (1),

Find out the Mean, Standard Deviation, Skewness β_1 and Kurtosis β_2 . [Show calculations]

[10]

3. The Production Manager of a company wants to study the relationship between the Batch Size (X) and the Production Cost (Y) in Rs. Thousands. The data is given below:

Batch No:	1	2	3	4	5	6	7	8	9	10
X :	11	13	18	24	28	32	38	42	47	53
Y :	2.1	2.7	2.9	2.9	3.1	3.0	3.3	3.7	4.0	4.4

- a) Plot a Scatter Diagram to explore the relationship
- b) Find the Correlation Coefficient
- c) Find out the Regression Line.

[20]

4. Illustrate various ways of presenting statistical data

[15]