

Indian Statistical Institute, Bangalore
M.S (QMS) First Year
First Semester – Statistics for Decision Making I

Mid-Semester Exam

Duration: 2hrs

Date: 10th Sept 2014

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

1. Following data of 25 companies relating to rate of dividend per share were collected randomly from the Ahmadabad stock exchange list.

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 and Kurtosis. [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]