Indian Statistical Institute Bangalore

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

Duraion: 2 Hr.s

Mid-Semester (Supplementary) Exam

Date: 29th Nov. 2019

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

Use of calculator 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. The following is the data on height of 30 students (in Cm.):

166.5	165.5	165.1	169.2	164.1	165.7
170.2	167.5	168.4	165.9	167.1	168.1
166.8	162.9	167.8	161.2	167.5	164.9
166.4	162.1	168.0	165.0	166.1	167.7
163.6	165.6	165.6	162.1	168.8	164.2

Find out The Mean, Standard Deviation, Mean Deviation, Skewness and Kurtosis.

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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:

Bato	h No:	1	2	3	4	5	6	7	8	9	10
	X :	11	13	18	24	28	32	38	42	47	53
	Υ:	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.

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