#### LINA -II (2006 Course) : SUMMER - 2016

# **Subject : Business Statistics-I**

Day : Monday
Date : 06/06/2016

S.D.E.

Time: 02.00 PM TO 05.00 PM Max Marks: 80 Total Pages: 2

### N. B. :

- 1) Attempt any **FOUR** questions from Section I. Each question carries 12 marks.
- 2) Attempt any TWO questions from Section II. Each question carries 16 marks.
- 3) Answers to both the sections should be written in the same answer book.
- 4) Graph paper will be provided if needed.
- 5) Use of scientific calculator is allowed.

#### **SECTION - I**

Q. 1 a) Construct histogram using following data:

Marks	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of Students	10	12	20	25	17	9	2

- b) Write comprehensive note on statistics with the help of:
  - i) Scope
- ii) Limitations
- Q. 2 Calculate mean, median and mode for the following data:

Earning (Rs.)	66-67	67-68	68-69	69-70	70-71	71-72
No. of Persons	15	24	40	20	14	11

Q. 3 Construct the frequency distribution of the following data:

15	55	18	25	56	39	26	18	32	15
25	25	22	25	46	46	25	12	36	35
35	68	35	32	38	56	32	22	46	48
10	75	42	36	24	64	39	35	64	42
45	40	56	48	18	78	42	54	47	54
50	20	63	45	35	26	54	58	35	68

Q. 4 Find  $Q_2$ ,  $P_{28}$ ,  $D_6$  for the data:

Wages	25	30	35	40	45	50	55
No. of Workers	10	25	75	130	170	185	200

Q. 5 Calculate the coefficient of mean deviation (from median) from the following data:

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of Students	2	6	12	18	25	20	7

- Q. 6 Write short note on **ANY TWO** of the following:
  - a) Causes of variation in Quality
  - b) Measures of dispersion
  - c) Types of control charts

### **SECTION - II**

**Q.** 7 For the following data:

Commodita	Year	2008	Year 2009			
Commodity	Price	Quantity	Price	Quantity		
A	12	20	15	20		
В	15	10	16	20		
С	20	15	22	23		
D	17	30	20	10		

## Compute:

- i) Laspeyre's price index number
- ii) Paasche's price index number
- iii) Fisher's price index number
- Q. 8 From the following data, calculate the first four moments
  - i) about the value 15
  - ii) about mean
  - iii) skewness based on moments
  - iii) kurtosis

Class interval	0-10	10-20	20-30	30-40
Frequency	1	3	4	2

Q. 9 Given the following data compute coefficient of variation and coefficient of range:

Monthly Income	10-20	20-30	30-40	40-50	50-60
No. of Families	15	20	25	15	10

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