

S.D.E.
B.B.A. (2006 Course) Sem- II : SUMMER - 2019
SUBJECT : BUSINESS STATISTICS- I

Day : Saturday
Date : 04/05/2019

Time : 10.00 AM TO 1.00 PM
Max. Marks : 80

S-2019-4895

N.B.

- 1) Attempt any **FIVE** questions from section- I, each question carries 10 marks.
- 2) Attempt any **TWO** questions from section- II, each question carries 15 marks.
- 3) Use of scientific calculator and graph papers is allowed.
- 4) Answers to both the section should be written on **SAME** answer book.

SECTION – I

Q.1 Define frequency. What do you mean by frequency distribution? What are the types of frequency distribution? Explain with suitable illustrations.

Q.2 Given the following data;

Monthly income ('000 Rs.)	10-12	12-14	14-16	16-18	18-20	20-22	22-24	24-26
No. of families	13	17	30	22	18	12	10	8

Compute median income and mode.

Q.3 Calculate quartile deviation and coefficient of quartile deviation for the following table;

Wages	Under 100	100-199	200-299	300-399	400-499	500-599	600-699	700-799	800 and above
Percentage of households	7.2	11.7	12.1	14.8	15.9	14.9	10.4	9.0	4.0

Q.4 What are the control charts? Describe different types of control charts with suitable examples.

Q.5 For the following data:

Commodity	Year 2010		Year 2011	
	Price	Quantity	Price	Quantity
A	6	10	7	10
B	8	5	8	10
C	10	8	11	13
D	8	15	10	5

Compute:

- a) Laspeyre's price index
- b) Paasche's price index
- c) Fisher's price index

P.T.O.

- Q.6** Write short notes on any two:
- Importance of business statistics
 - Partition values
 - Applications of index numbers
 - Measures of central tendency

Q.7 Define data. What are the types of data and sources of data collection?

SECTION - II

Q.8 Draw less than and more than ogive curves from the data given below;

Weekly wages (‘00 Rs.)	0-20	20-40	40-60	60-80	80-100
No. of workers	10	20	40	20	10

Q.9 An incomplete frequency distribution is given below;

Classes	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	10	20	?	40	?	25	15

You are given median value is 35. Find out missing frequencies. (Given: Total frequency = 170). Calculate arithmetic mean for completed table.

Q.3 Two brands of tyres are tested with the following results:

Life (in ‘000 miles)	Number of tyres of brand	
	X	Y
20-25	1	0
25-30	22	24
30-35	64	76
35-40	10	0
40-45	3	0

- Which brand of tyres has greater average life?
- Compare variability and state which brand of tyres would you use for your trucks?

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