

S.D.E.
B.B.A. (2006 COURSE) SEM- II : SUMMER - 2018
SUBJECT: BUSINESS STATISTICS-I

Day: **Friday**
Date: **01/06/2018**

S-2018-4291

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

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 **SEPARATE** answer books.
- 4) Use of scientific calculator and log table are allowed.
- 5) Graph papers will be provided if needed.

SECTION – I

- Q.1** a) Explain in brief: **(06)**
i) Control Charts
ii) Methods of data collection
- b) Find Quartile Deviation and its Coefficient for the following data. **(06)**

Roll No:	1	2	3	4	5	6	7
Marks:	20	28	40	12	30	15	50

- Q.2** Present the following data of the percentage marks of 60 students in the form of frequency table with 10 classes of equal width, one class being 50-59. **(12)**

41	17	83	63	54	92	60	58	70	06	67	82
33	44	57	49	34	73	54	63	36	52	32	75
60	33	09	72	28	30	42	93	43	80	03	32
57	67	24	64	63	11	35	82	10	23	00	41
60	32	72	52	92	88	62	55	60	33	40	57

Find Cumulative Frequencies of both types.

- Q.3** Draw a Histogram and Frequency Polygon separately for the data below: **(12)**

Age in years:	15-25	25-35	35-45	45-55	55-65	65-75	75-85
No. of Persons:	4	15	26	30	22	15	3

- Q.4** For a certain frequency table which has only been partly reproduced here, the Mean was found to be 1.46. **(12)**

No. of accidents:	0	1	2	3	4	5	Total
Frequency:	46	-	-	25	10	5	200

Calculate Missing Frequencies.

- Q.5** From the following data construct an Index for 2010 taking 2005 as base year by the average of relatives method using: **(12)**
i) Arithmetic Mean
ii) Geometric Mean

Commodity	Price in Rs. 2005	Price in Rs. 2010
A	70	90
B	100	130
C	60	85
D	120	150
E	95	135

P.T.O.

SECTION - II

Q.6 Calculate Mean, Median and Mode for the following data: **(16)**

X	10	20	30	40	50	60	70	80	90	100
Cumulative Frequency	140	133	118	100	75	45	25	9	2	0

Q.7 Goals scored by two teams in a football session were as follows **(16)**

No. of goals scored in a Match	No. of Matches Played	
	Team A	Team B
0	18	22
1	20	15
2	17	10
3	6	18
4	3	7
5	6	8
sTotal	70	80

Calculate the Coefficient of Variation and state which team is more consistent?

Q.8 The Mean and Standard Deviation of 20 items are found to be 10 and 2 respectively. At the time of checking it was found that one of the item 8 was incorrect. Calculate the Mean and Standard Deviation if: **(16)**

- i) The wrong item is omitted
- ii) It is replaced by 12

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