

BACHELOR OF BUSINESS ADMINISTRATION (CBCS - 2018 COURSE)
B.B.A. Sem-II : : SUMMER - 2022
SUBJECT : BUSINESS STATISTICS

Day : Monday
Date : 13-06-2022

S-18819-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.

- 1) Attempt any **THREE** questions from section-I and any **TWO** questions from section -II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non-programmable **CALCULATOR** is allowed.
- 4) Use graph paper **WHEREVER** necessary.
- 5) Answers to both the sections should be written in **SAME** answer book.

SECTION - I

- Q.1 a)** Find the Standard Deviation(S.D.) from the following data **(06)**

Class Intervals	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40
Frequency	7	10	16	32	24	18	10	5

- b)** Discuss 'Scatter Diagram' with all its possible patterns. **(06)**

- Q.2 a)** Find Mode and Median for the data given below : **(06)**

Classes	0-10	10-20	20-30	30-40	40-50
Frequency	5	8	10	16	6

- b)** Differentiate: Correlation Vs. Regression. **(06)**

- Q.3** The following data relates price of commodity **(12)**

	Wholesale price (x)	Retail price (y)
Mean	80	100
Std. deviation	8	5

- a) Obtain the line of Regression 'x' on 'y' and
- b) Estimate retail price of commodity when wholesale price becomes 85.

- Q.4 a)** Elaborate the Utility of Regression Analysis in Business Management. **(06)**

- b)** Obtain the Rank Correlation Coefficient between data 'x' and data 'y' **(06)**

Data x	68	64	75	50	64	80	75	40	55	64
Data y	62	58	45	81	60	68	48	50	74	72

- Q.5** Write short note on (ANY TWO) **(12)**

- a) Geometric mean
- b) Independent Events
- c) Bayes' Theorem

SECTION - II

- Q.6** a) Define and Discuss concept of Conditional Probability. (06)
- b) A card is selected randomly from a well shuffled pack of 52 playing cards (06)
find the probability of :
- i) A selected card either will be Black King or Red King
 - ii) A selected card becomes red number card.

- Q.7** a) Find the association between literacy and unemployment from figures (06)
given-

Total Adults	10,000
Literates	1,290
Unemployed	1,390
Literate Unemployed	820

Comment on the result.

- b) Discuss the concept of expected value and Variance. (06)
- Q.8** a) The Mean and Standard deviation of 200 items are found to be 60 and 20 (06)
respectively. At the time of calculations, two items were wrongly taken as
3 and 67 instead of 13 and 17. Find the correct Mean and Standard
Deviation.
- b) Describe various Methods of studying Correlations. (06)

* * * *