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BACHELOR OF BUSINESS ADMINISTRATION (CBCS - 2018 COURSE)

B.B.A. Sem-II : WINTER- 2022

SUBJECT : BUSINESS STATISTICS

Day : Wednesday

Time : 10:00 AM-01:00 PM

Date : 14-12-2022

W-18819-2022

Max. Marks : 60

N.B.

- 1) Attempt **ANY THREE** questions from Section – I. Each question carries 10 marks.
 - 2) Attempt **ANY TWO** questions from Section – II. Each question carries 15 marks.
 - 3) Answers to both the sections should be written in **SAME** answer book.
 - 4) Use of non-programmable **CALCULATOR** is allowed.
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SECTION – I

Q.1 Define Correlation. Explain the types of Correlation by using Scatter Diagram.

Q.2 Calculate mean, median and mode for the following data :

Marks :	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students :	5	10	30	60	45	25	15

Q.3 A pair of dice is thrown. Find the probability of getting the sum

- i) Multiple of 3
- ii) Divisible by 3 or 4.

Q.4 In a sample survey of 2500 students 1000 liked Economics, 1750 liked Statistics and 600 liked both Economics and Statistics. Find whether liking in two subjects Economics and Statistics is associated or not?

Q.5 Write short notes on **ANY TWO** of the following :

- a) Quartiles, deciles and percentiles
- b) Conditional probability
- c) Distinction between correlation and regression

SECTION – II

Q.6 For the following data :

- i) Calculate Karl Pearson's coefficient of correlation
- ii) Estimate the value of x when y = 50
- iii) Estimate the value of y when x = 62.

x :	28	37	40	38	35	33	40	32	34	33
y :	23	32	33	34	30	26	29	31	34	38

Q.7 Following table shows marks of student A and student B in 8 tests of 200 marks each. Calculate mean and coefficient of variation and state who is more intelligent and who is more consistent?

A :	50	100	90	60	120	140	66	102
B :	20	140	160	100	100	40	120	80

Q.8 The probability that the two products A and B newly introduced by a company will pick up good markets are 0.50 and 0.65 respectively. What is the probability that

- i) Product A alone will pick up the market?
- ii) Product B will pick up the market?
- iii) None of them will pick up the market?
