

S.D.E.
M.B.A. (Executive) SEM-I (CBCS - 2018 Course) : SUMMER - 2019
SUBJECT: STATISTICAL & MATHEMATICAL TECHNIQUES

Day: Wednesday
Date: 08/05/2019

Time: 10.00 AM TO 1.00 PM
Max. Marks: 70

S-2019-5002

N.B. :

- 1) Attempt **ANY FOUR** questions from Section - I. Each question carries **10** Marks.
- 2) Attempt **ANY TWO** questions from Section - II. Each question carries **15** marks.
- 3) Figures to the right indicate **FULL** marks.
- 4) Use of non-programmable calculator is **ALLOWED**.

SECTION - I

Q.1 "Statistics plays an important role not only in production but also in human resource management." Explain this statement with appropriate examples.

Q.2 Draw less than cumulative frequency curve for the following data:

Marks:	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students:	10	25	40	70	35	20	5

Q.3 Define Bayes's theorem? Explain with suitable examples.

Q.4 What is frequency distribution? Explain various types of frequency distributions in brief.

Q.5 Calculate Karl Pearson's coefficient of correlation for the following data:

X:	27	25	38	34	25	30	32
Y:	32	38	28	26	30	31	36

Q.6 Write short notes on **ANY TWO** of the following :

- a) Types of correlation
- b) Conditional probability
- c) Types of decision

SECTION - II

Q.7 Calculate mean, median & mode for the following data:

Marks:	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students:	2	10	15	30	22	18	4

Q.8 In a sample of 500 scores, the mean of certain test is 14 and standard deviation is 2.5.

- i) How many students have scored between 12 & 15
- ii) How many scored above 18
- iii) How many scored below 8

Q.9 In a sample survey of 2500 students 1000 liked economics, 1750 liked statistics & 600 liked both economics & statistics. Find whether liking in two subjects economics and statistics is associated or not?

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