

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)

B.C.A. Sem-III : WINTER : 2021

SUBJECT: STATISTICS

Day : *Friday*
Date : *14-01-2022*

W-18770-2021

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) Answers to both the sections should be written in **SAME** answer book.
- 4) Use of non-programmable **CALCULATOR** is allowed.
- 5) Use graph papers **WHEREVER** necessary.

SECTION-I

Q.1 Define Statistics. Discuss scope of statistics in Economics and Computer Science. (12)

Q.2 Two ladies were asked to rank 7 different types of chocolates. The ranks given by them were: (12)

Chocolates	A	B	C	D	E	F	G
Sneha	2	4	1	3	5	7	6
Pooja	1	3	2	5	4	7	6

Calculate Spearman's rank correlation coefficient and comment on result.

Q.3 Calculate Mean, Median and Mode for the data given below: (12)

Classes	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	4	5	9	15	10	7

Q.4 Calculate Mean deviation about mean for the data given below: (12)

X	4	6	8	10	12	14	16
f	2	1	3	6	4	3	1

Q.5 Write short notes on any **TWO** of the following: (12)

- a) Components of Time Series
- b) Ogive curves
- c) Standard deviation

SECTION-II

Q.6 Calculate Karl Pearson's coefficient of correlation from the following data: (12)

X	14	16	17	18	19	20	21	22	23
Y	84	78	70	75	66	67	62	58	60

Q.7 Obtain the two regression equations for the following data given below: (12)

X	1	2	3	4	5	6	7	8	9	10
Y	2	4	5	6	8	2	6	4	5	7

Q.8 Define secondary data. Explain various sources of secondary data collection. (12)