## **CDOE**

## BACHELOR OF COMPUTER APPLICATIONS (CBCS-2019 COURSE)

B.C.A. SEM - III: WINTER: - 2021 SUBJECT: STATISTICS

**Day :** Friday **Date 18-02-2022** 

W-21870-2021

Time: 02:00 PM-05:00 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. Explain importance of statistics in Business and (12) Management.

**Q.2** Draw histogram and frequency polygon for the following data:

(12)

Marks obtained	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	20	50	80	100	70	10

**Q.3** Calculate Mean, Median and Mode for the following data:

(12)

Classes	10-20	20-30	30-40	40-50	50-60	60-70	70-80
frequency	10	28	32	60	34	20	16

Q.4 Calculate standard deviation for the data given below:

(12)

X	4	5	6	7	8	9	10
f	3	7	22	60	85	32	8

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

**(12)** 

(12)

(12)

- a) Pie diagram
- b) Sources of Primary data
- c) Spearman's Rank correlation

## **SECTION-II**

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

X	5	8	9	11	12	15
Y	8	7	10	13	11	17

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

X	32	28	47	63	71	39	10	60	96	14
Y	49	57	30	45	50	32	51	39	55	52

**Q.8** Explain various components of Time Series Analysis.

(12)