MASTER OF COMPUTER APPLICATIONS (CBCS – 2022 COURSE)
M.C.A. Sem – I : WINTER- 2022
SUBJECT : COMPUTATIONAL STATISTICS

Day : Tuesday

Time : 02:00 PM-05:00 PM

Date : 6/12/2022

W-25935-2022

Max. Marks : 100

N.B.

1) Attempt **ANY FIVE** questions from Section – I. Each question carries 12 marks.
2) Attempt **ANY TWO** questions from Section – II. Each question carries 20 marks.
3) Figures to the **RIGHT** indicate **FULL** marks.
4) Answers to both the sections should be written in **SAME** answer book.
5) Use of non-programmable calculator is **ALLOWED**.

SECTION – I

Q.1 'The science of Statistics is a most useful servant but only a great value to those who understand its proper use-King.' Comment on the above statement and discuss the scope of statistics. **(12)**

Q.2 Define R. Explain various data types in R. **(12)**

Q.3 Calculate mean, median and mode for the following data. **(12)**

Classes	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	2	4	10	18	8	4	3	1

Q.4 Calculate mean deviation from median for the following data. **(12)**

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	10	16	30	32	50	40	12

Q.5 Fit a straight line trend for the following data by taking 3 yearly moving averages. **(12)**

Year	2007	2008	2009	2010	2011	2012	2013
Sales (Rs '000)	30	36	28	19	29	35	40

Q.6 Write short notes on **ANY TWO** of the following : **(12)**
   a) Components of time series
   b) Concept of raw and central moments
   c) Characteristics of a good statistical average

SECTION – II

Q.7 For the following data, calculate Karl Pearson's coefficient of correlation. Also obtain the two regression equations. **(20)**

X	36	23	27	28	28	29	30	31	33	35
Y	29	18	20	22	27	21	29	27	29	28

Q.8 **a)** Explain various types of statistical data with suitable examples. **(10)**

   b) Explain the concepts: Skewness and Kurtosis. **(10)**

Q.9 The weekly sales of two products A and B were recorded as below. **(20)**

Product A	59	75	27	63	27	28	56
Product B	150	200	125	310	330	250	225

Calculate coefficient of variation and find which of the product shows greater fluctuation in sales.

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