

B.C.A. SEM-IV (2014 Course) CBCS : SUMMER - 2019
SUBJECT : STATISTICS

Day : Thursday
Date : 25/04/2019

S-2019-2074

Time : 10.00 AM TO 01.00 PM
Max. Marks :100

N.B.

- 1) Attempt any **FOUR** questions from Section – I and any **TWO** questions from Section – II .
- 2) Answers to both the sections should be written in **SAME** answer book.
- 3) Use of non-programmable calculator is allowed.
- 4) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** Explain the term Statistics. Discuss its scope in Business. **(15)**
- Q.2** What is Scatter Diagram? How does it help in studying the correlation between two variables in respect of both of its direction and degree? **(15)**
- Q.3** Represent the following data by a pie-diagram: **(15)**

Item	Expenditure in Rs.
Food	84
Clothing	27
Recreation	10
Education	15
Rent	23
Miscellaneous	21

- Q.4** Calculate mean, median and mode for the following data: **(15)**

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	10	20	35	50	45	30	15

- Q.5** Calculate mean deviation about median and its coefficient from the following data: **(15)**

Age (in years)	25-30	30-35	35-40	40-45	45-50	50-55
No. of Workers	30	47	51	38	28	19

- Q.6** Calculate Karl-Pearson's coefficient of correlation from the following data: **(15)**

X	80	90	95	69	60	80	68	62
Y	125	135	160	110	120	136	123	108

- Q.7** Write short notes on **ANY THREE** of the following: **(15)**
- a) Absolute and relative measures of dispersion
 - b) Frequency distribution
 - c) Limitations of Statistics
 - d) Good measures of Central Tendency
 - e) Properties of Correlation Coefficient

P.T.O.

SECTION – II

Q.8 Define Primary Data. Explain any four primary data collection methods in brief. **(20)**

Q.9 a) Draw Histogram and frequency polygon for the following data: **(10)**

Marks	10–20	20–30	30–40	40–50	50–60	60–70
No. of Students	20	30	55	45	20	18

b) Draw Ogive curves for the following data. **(10)**

Marks	10–20	20–30	30–40	40–50	50–60	60–70
No. of Students	8	14	20	25	15	10

Q.10 You are given the data relating to purchases and sales. Obtain the two regression equations and estimate the likely sales when the purchases equal to 125 **(20)**

Purchases	63	75	100	75	80	56	75	93	90	50
Sales	110	120	131	120	132	96	120	138	95	87

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