

M.C.A. SEMESTER-II (CBCS 2018) : SUMMER - 2019

SUBJECT: STATISTICAL TECHNIQUES

Day: Wednesday

Date: 24/04/2019

S-2019-2157

Time: 10.00 AM TO 01.00 PM

Max. Marks: 60

**N.B.:**

- 1) Q 4 from Section I is COMPULSORY.
- 2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
- 3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
- 4) All questions CARRY EQUAL marks.
- 5) Answers to Both the sections to be written in *SAME* answer books.

**SECTION - I**

Q.1) Answer the following: (6 Marks X 2 = 12)

- a) Explain the Primary and secondary data.
- b) Calculate Mean and Median for data given below:

Marks :	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of students :	6	5	8	15	7	6	3

Q.2) Answer the following: (6 Marks X 2 = 12)

- a) The ranks of the 6 students in two subjects are given below. Find the spearman's rank correlation coefficient.

Mathematics	1	2	3	4	5	6
Statistics	2	3	1	6	4	5

- b) Explain Variance and Standard Deviation.

Q.3) Explain the following: (6 Marks X 2 = 12)

- a) What is meant by correlation? Explain positive, negative correlation.
- b) Explain the concept of error in regression.

Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X 3 = 12)

- a) Cumulative frequency
- b) Mean deviation
- c) Concept of kurtosis
- d) Consistency of data
- e) Scatter diagram

**SECTION - II**

Q.5) Answer the following: (6 Marks X 2 = 12)

- a) Define Geometric Mean and explain its properties.
- b) Explain quartiles, deciles and percentiles for grouped data.

Q.6) Answer the following: (6 Marks X 2 = 12)

- a) Explain Association of Attributes.
- b) Calculate Karl Pearson's coefficient of correlation for the data given below:

Imports	42	44	58	55	89	98	66
Exports	56	49	53	58	65	76	58

Q.7) Explain the following: (6 Marks X 2 = 12)

- a) Find out two regression equation from the following data:

X	1	2	3
Y	8	6	4

- b) Explain Yule's coefficient of Association.

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