Sem-III–Eco-CC-7
(Reg)

2020-21

Time - 3 hours
Full Marks – 80

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Candidates are required to answer
in their own words as far as practicable.

Group-A

1. Answer all questions or fill in blanks as required. [1x12]
   a) The data which is collected in the first hand from original source is called_____.
   b) Data are generally classified into_____ and _____.
   c) Median is an average of_____.
   d) _____is the value that has the greatest frequency.
   e) In case of bi-modal series, mode = 3 median minus 2_____.
   f) G.M. is the_____ root of the product of all the observations.
   g) The sum of the deviations of the items from median is the_____ (most, least).
   h) If variance is 81 and mean is 50, then C.V. is _____.
   i) The value of co-efficient of correlation lies between_____.
   j) When r= +1, then correlation is _____.
   k) The mode of 5. 3, 4, 3, 6, 5.3 is _____.
   l) The data arranged according to the time of occurance is called_____ data.

Group-B

2. Answer any eight of the following questions within two or three sentences each. [2x8]
   a) What are various methods of collection of primary data?
   b) Define sample.
   c) Write three characteristics of a good average.

d) Point out two important differences between primary and secondary data.

e) Write the mathematical property of median.

f) What is positive correlation?

g) What are two advantages of median over Arithmetic mean?

h) Calculate median of 20, 10, 15, 18 and 22.

i) What is Fisher's Ideal Index?

j) What are mutually exclusive events?

GROUP-C

3. Write notes on any eight of the followings within 75 words: [3x8]

a) Distinguish between primary and secondary data.

b) Prove that the algebraic sum of deviations of items from arithmetic mean is always zero.

c) Write the prime merits of mode.

d) Differentiate between mean deviation and standard deviation.

e) Write important properties of Karl Pearson's co-efficient of correlation.

f) Write a brief note on method of semi-average.

g) Write the addition rule of probability.

h) Distinguish between simple and multiple correlation.

i) An unbiased die is thrown. Find the probability of falling with the number 3 up.

j) The mean mark of 60 boys is 50 and 40 girls is 60. Find out the combined mean of 100 boys and girls students.

GROUP- D

4. Answer any four questions within 500 words each. [7x4]

a) Discuss various methods of collection of primary data.

b) From the following data, find out the median mark.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Student	4	6	20	10	7	3

c) Calculate standard deviation from following data.

Marks in Economics	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of Student	5	7	14	12	9	6	2

d) Find out Spearman's Rank correlation co-efficient from the following data:

Advertisement Exp:	39	65	62	90	82	75	25	98	36	78
Sales	47	53	58	86	62	68	60	91	51	84

e) Define time series. Discuss various components of time series.

f) From a pack of playing cards, one card is drawn at random. Find the probability that it is either a spade or a club.

g) Using the following data, calculate Fisher's Ideal Index.

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24
E	8	40	12	36

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