2023

Time - 3 hours

Full Marks - 60

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.

GROUP – A

1. Fill in the blanks. (all)   [1 × 8

   (a) _____ is considered as the father of Modern Statistics.

   (b) Statistics is derived from the Latin word _____.

   (c) Histogram is a _____ frequency graph.

   (d) The most popularly used measure of central tendency is _____.

   (e) The most frequently occurring score in a distribution is _____.

   (f) The value of perfect negative correlation is _____.

   (g) Rank difference method was developed by _____.

   (h) Z-score is also known as _____.

GROUP – B

2. Answer <u>any eight</u> of the following questions within two to three sentences each. [1½ × 8

(a) What do you mean by secondary data ?

(b) What is exclusive type class interval ?

(c) Write any two uses of frequency polygon.

(d) Define measure of central tendency.

(e) Mention the uses of mode.

(f) What is zero correlation ?

(g) Draw a diagram showing negative correlation.

(h) Write the formula of product moment method.

(i) Why T-score is used ?

(j) What are the different types of kurtosis ?

GROUP – C

3. Answer <u>any eight</u> of the following questions within 75 words each. [2 × 8

(a) Write the meaning of Educational Statistics.

(b) Explain cumulative frequency with example.

(c) What are the uses of polygon ?

(d) Calculate the Mean from the following scores :

10, 8, 25, 24, 30, 45

(e) Calculate the Median from the given scores :

5, 4, 3, 2, 1, 9, 15

(f) Write the limitations of Mode.

(g) What are the uses of Quartile Deviation ?

(h) Calculate the Average Deviation from the following scores :

20, 18, 42, 46, 50, 64, 75

(i) Discuss the types of skewness.

(j) Write the advantages of standard score.

GROUP – D

*Answer **all** questions within 500 words each.*

4. Discuss the various uses of Statistics. [6

OR

Draw a frequency polygon of the data given in the next page :

C.I.	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69
f	4	5	8	7	9	6	4	3

5. Calculate the median of the following distribution : [6

C.I.	45-49	40-44	35-39	30-34	25-29	20-24
f	8	2	8	8	9	5

OR

Find out standard deviation of the following distribution.

C.I.	10-14	15-19	20-24	25-29	30-34
f	2	8	6	2	2

6. Five students in a class have secured the following marks in English test and Science test. Find out correlation by rank difference method. [6

Students	A	B	C	D	E
Scores in English	78	80	81	60	90
Scores in Science	80	83	85	95	50

OR

Compute the product moment coefficient of correlation between two sets of score given below :

X	55	65	25	50	40
Y	50	75	45	55	50

7. Discuss the concept and applications of normal probability curve. [6

OR

Explain skewness.