

c) Scatter plot

d) Histogram

Group-B

(Short Answer Type Questions)

5 x 7=35

Answer all the questions.

2. Describe the following measure of dispersions: (i) Range, (ii) Mean deviation, and (iii) Quartile deviation. (5)

3. Explain the concept of qualitative and quantitative research.. (5)

4. Explain the concept of population and sample briefly. (5)

5. The following frequency table is given below: (5)

Class	1-2	2-3	3-4	4-5	5-6	6-7
Frequency	17	14	2	10	15	10

Evaluate the mode of the frequency distribution.

6. The following frequency table is given below: (5)

Class	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	71	1	1	2	5	2

Evaluate the median of the frequency distribution.

7. The following frequency table shows the pulse rate (in bpm) of 120 patients in a hospital: (5)

Pulse rate	50-60	60-70	70-80	80-90	90-100
Frequency	?	36	28	?	2

Average pulse rate of the patients is 70 bpm. Calculate the unknown frequencies.

OR

The following frequency table is given below: (5)

Class	1-2	2-3	3-4	4-5	5-6	6-7
Frequency	12	14	15	10	8	9

Evaluate the mean of the frequency distribution.

8. The probability that the noise level of a wide band amplifier will exceed 2 dB is 0.05. for a group of 12 amplifiers, calculate: (5)

- a. one will exceed 2 dB
- b. at most two will exceed 2 dB
- c. two or more will exceed 2 dB

OR

Given that the switch board of a consultant's office receives on the average 0.6 calls per minute, calculate the probability that: (5)

- a. in a given minute, there will be at least one call
- b. in a 4-minute interval, there will be at least three calls

Group-C

(Long Answer Type Questions)

10 x 2=20

Answer all the questions.

- 9. Describe the limitation of simple linear regression with proper example. (10)
- 10. Illustrate the concept of research protocol. (10)

OR

Illustrate the concepts of type-I and type -II error briefly with an example. (10)
