Chapter-statistics

Q1.

Find mode, using an empirical relation, when it is given that mean and median are 10.5 and 9.6 respectively.

Q2.

The following data gives the information on the observed life times (in hours) of 150 electrical components

Life time (in hours)	0 – 20	20 – 40	40 – 60	60 – 80	80 – 100
Frequency	15	10	35	50	40

Find the mode of the distribution.

Q3.

Given below is a cumulative frequency distribution of "less than type".

Marks obtained	Less than 20	Less than 30	Less than 40	Less than 50
No. of students cumulative frequency	8	13	19	24

Change the above data into a continuous grouped frequency distribution

Q4.

If the mean of the following distribution is 54, find the missing frequency x:

Class	0–20	20–40	40–60	60–80	80–100
Frequency	16	14	24	26	x

Q5.

Ramesh is a cricket player. He played 50 matches in a year. His data regarding runs scored is given below. Calculate his average score.

Score (runs)	0–20	20–40	40–60	60–80	80–100	100–120
Number of matches	5	11	13	7	8	6

Q6.

Find the median of the following data

Class Interval	5–15	15–25	25–35	35–45	45–55	55–65	65–75
Frequency	6	10	16	15	24	8	7

Q7.

The weights of tea in 70 packets are shown in the following table.

Weight (in gm)	200–201	201–202	202–203	203–204	204–205	205–206
No. of packets	13	27	18	10	1	1

Find the mean weight of packets using step deviation method.

Q8.

In the following frequency distribution, find the median class.

Height (in cm)	104-145	145-150	150-155	155-160	160-165	165-170
Frequency	5	15	25	30	15	10

Q9.

Weekly income of 600 families is given below

Income (in ₹)	Frequency
0–1000	250
1000–2000	190
2000–3000	100
3000–4000	40
4000–5000	15
5000–6000	5

Find the median.

Q10.

Calculate mode of the following data

Marks Obtained	No. of students
0 – 20	8
20 – 40	10
40 – 60	12
60 – 80	6
80 – 100	3