M.M.: 30 **Time: 1 Hour**

General Instructions:

(i) There are 10 questions in this paper.

(ii) All questions are compulsory.

1. For the following distribution:

Class	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25
Frequency	10	15	12	20	9

the sum of lower limits of median class and modal class is:

2. For the following distribution:

Class	Frequency
0 – 10	5
10 – 20	2
20 – 30	8
30 – 40	18
40 – 50	10

Find the upper limit of the modal class.

3. The frequency distribution of daily rainfall in a town during a certain period is shown below.

Rainfall (in mm)	Number of days
0 – 20	7
20 – 40	x
40 – 60	10
60 – 80	4

Unfortunately, due to manual errors, the information on the 20-40 mm range got deleted from the data.

If the mean daily rainfall for the period was 35 mm, find the number of days when the rainfall ranged between 20-40 mm. Show your work.

6. If the median of the following frequency distribution is 32.5. Find the value of f_1 and f_2.

Class	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	Total
Frequency	f_1	5	9	12	f_2	3	2	40

7. The mean of the following distribution is 18. Find the frequency f of the class 19 – 21.

Class	11 – 13	13 – 15	15 – 17	17 – 19	19 – 21	21 – 23	23 – 25
Frequency	3	6	9	13	f	5	4

8. Daily wages of 110 workers, obtained in a survey, are tabulated below:

Daily Wages (in `)	100 – 120	120 – 140	140 – 160	160 – 180	180 – 200	200 – 220	220 – 240
Number of Workers	10	15	20	22	18	12	13

Compute the mean daily wages and modal daily wages of these workers.

9. Heights of 50 students of class X of a school are recorded and following data is obtained:

Height (in cm)	130 – 135	135 – 140	140 – 145	145 – 150	150 – 155	155 – 160
Number of Students	4	11	12	7	10	6

Find the median height of the students.

10. The median of the following data is 525. Find the values of x and y, if total frequency is 100.

Class	Frequency
0 – 100	2
100 – 200	5
200 – 300	x
300 – 400	12
400 – 500	17
500 – 600	20
600 – 700	y
700 – 800	9
800 – 900	7
900 – 1000	4