CH – 14 STATISTICS

Practice Sheet – 1

Q1. The marks obtained by 40 students of class-X of a certain school in Mathematics unit test consisting of 10 marks are presented in table below. Find the mean of the marks obtained by the students.

Marks obtained (x_i)	5	6	7	8	9
No. of Students (f_i)	4	8	14	11	3

Q2. Consider the following distribution of daily wages of 100 workers in a Jute Mill. Find the mean of no. of workers working on daily wages .

Daily wages(in Rs.)	80 – 100	100 – 120	120 – 140	140 – 160	160 – 180
No. of workers	40	20	15	15	10

Q3. The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is Rs. 7.5. Find the missing frequency f.

Daily Pocket allowance (in Rs.)	2 – 4	4 – 6	6 – 8	8 – 10	10 – 12	12 – 14
No. of Children	6	8	15	f	8	4

Q4. If the mean of the following distribution is 6. Find the value of p.

x	2	4	6	10	p + 5
f	3	2	3	1	2

Q5. The data of number of patients attending a hospital in a month are given below. Find the average number of patients attending the hospital in a day.

No. of patients	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
No. of days attending hospitals	2	6	9	7	4	2

Q6. The mean of the following frequency distribution is 62.8. Find the missing frequency x.

Class	0-20	20-40	40-60	60-80	80-100	100-120
Frequency	5	8	x	12	7	8

Q7. A class teacher has the following absentee record of 40 students of a class for the whole term. Find the mean of number of days a student was absent.

No of days	0-6	6-12	12-18	18-24	24-30	30-36	36-42
No of students	10	11	7	4	4	3	1

Q8. Find the mean, median and mode of the data.:

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	4	4	7	10	12	8	5

Q9. If the mean of the following frequency distribution is 65.6. Find the missing frequencies f_1 and f_2.

Class	10-30	30-50	50-70	70-90	90-110	110-130
Frequency	5	8	f_1	20	f_2	2

Practice Sheet 2

Q10. Find the mode for the following distribution :

Score	80 – 90	90 – 100	100 – 110	110 – 120	120 – 130	130 – 140	140 – 150
No. of pupil	18	27	48	39	12	6	16

Q11. Find mode for the following distribution :

Marks	10 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69
Frequency	19	21	27	21	22	20

Q12. The following table gives Intelligent Quotient (I.Q) of 100 students:

I.Q.	No. of Students
55 – 65	1
65 – 74	2
75 – 84	9
85 – 94	22
95 – 104	33
105 – 114	22
115 – 124	8
125 – 134	2
135 – 144	1

Find the mode.

Q13. The following table gives heights (in cms) of 420 persons :

Heights (in cms)	160 – 162	163 – 165	166 – 168	169 – 171	172 – 174
No. of persons	15	118	142	127	18

Find the median height.

Q14. Find the median wage of the workers from the following frequency distribution table :

Wages (in Rs.)	No. of workers
More than 150	0
More than 140	10
More than 130	29
More than 120	60
More than 110	104
More than 100	134
More than 90	151
More than 80	160

Q15. Frequency table of the marks obtained by 50 students is given below :

Marks Obt.	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
No. of students	3	f_1	20	10	5	f_2

Given that the median marks are 28.5,find the missing frequencies f_1 and f_2 .

Q16.Find the missing frequencies in the following distribution. It is given that median of the distribution is 41 and the total number of observations is 82.

Class	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	10	f_1	15	20	f_2	11

Q17.In the following frequency distribution locate the median :

Monthly consumption of electricity	No. of consumers
65 – 85	4
85 – 105	5
105 – 125	13
125 – 145	20
145 – 165	14
165 – 185	7
185 – 205	4

Q18. The table below shows the salaries of 280 persons:

Salary (in Thousand Rs.)	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
No. of Persons	49	133	63	15	6	7	4	2	1

Calculate the median salary of the data.

Q19. The following distribution gives the daily income of 50 workers of a factory:

Daily income (in Rs.)	100-120	120-140	140-160	160-180	180-200
No.of Workers	12	14	8	6	10

Find the mean and mode of the above data.

Q20.Find the median of the following distribution :

Class	0-10	10-20	20-30	30-40	40-50
Frequency	8	12	10	11	9

Q21. The following table gives the daily income of 50 workers of a factory:

Daily income (in Rs.)	100-120	120-140	140-160	160-180	180-200
No.of Workers	12	14	8	6	10

Find the mean, median and mode of the data.

Q22. Find the mean, median and mode of the data.

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	4	4	7	10	12	8	5

Q23. The median of the following data is 52.5. If the total frequency is 100, find the values of x an d y .

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Freq	2	5	x	12	17	20	y	9	7	4