



Class – X	CHAPTER - STATISTICS	SUBJECT - MATHEMATICS
------------------	-----------------------------	------------------------------

1. The weekly observation on cost of living index in a certain city for the year 2000-2001 are given below. Compute the mean weekly cost of living index.

Cost of living index(in ₹)	140-150	150-160	160 -170	170-180	180-190	190-200
Number of weeks	5	10	20	9	6	2

2. Find the mean marks by step-deviation method from the following data:

Marks	Below 10	Below 20	Below 30	Below 40	Below 50	Below 60
No. of students	4	10	18	28	40	70

3. The mean of the following data is 50. Find the missing frequencies f_1 and f_2 .

C.I	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100	Total
Frequency	17	f_1	32	f_2	19	120

4. Find the mean age (in years) from the following frequency distribution:

Age (in years)	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49
Frequency	3	13	21	15	5	4	2

5. The weights of coffee in 70 packets are shown in the following table:

Weight (in g)	200 - 201	201 - 202	202 - 203	203 - 204	204 - 205	205 - 206
Number of packets	12	26	20	9	2	1

Determine the modal weight.

6. The mode of the following frequency distribution is 55. Find the values of x and y.

Class Interval	0 - 15	15 - 30	30 - 45	45 - 60	60 - 75	75 - 90	Total
Frequency	6	7	x	15	10	y	51

7. The following table shows the marks obtained by 100 students of class X in a school during a particular academic session. Find the mode of this distribution.

Marks	Less than 10	Less than 20	Less than 30	Less than 40	Less than 50	Less than 60	Less than 70	Less than 80
No. of students	7	21	34	46	66	77	92	100

8. Find the mode of the following distribution:

Daily wages (in ₹)	31 – 36	37 – 42	43 – 48	49 – 54	55 – 60	61 – 66
No. of workers	6	12	20	15	9	4

9. The following table shows the weekly drawn wages by number of workers in a factory:

Weekly wages(in ₹)	0 – 100	100 – 200	200 – 300	300 – 400	400 – 500
No. of workers	40	39	34	30	45

Find the median wage income of the workers.

10. Compute the median from the marks obtained by the students of class X.

Marks	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89	90 – 99
No. of students	5	10	20	30	20	15

11. Given that the median value is 46, determine the missing frequencies x and y.

Variable	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80	Total
Frequency	12	30	x	65	y	25	18	229

12. The following table shows the ages of the patients of economical weaker sections of society provided free treatment in a private hospital during a year. Find the mode of the data.

Ages(in years)	5 – 15	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65
No. of patients	6	11	21	23	14	5

Also, calculate the median using the empirical formula, if the median of the data is 35.5. What value is indicated from this data?

13. For the data given below, draw the “Less than and greater than Ogive” and hence find the value of median.

Production(in tons)	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
No. of labourers	8	18	23	37	47	26	16	7

14. There are three sections A, B and C in class X with 25, 40 and 35 students respectively. The average marks obtained by section A, B and C are 70%, 65% and 50% respectively. Find the average marks of entire class X.

15. The mean weight of a class of 35 students is 45 kg. If the weight of the teacher be included, the mean weight increases by 500 grams. Find the weight of the teacher.

Ms.Sonia Parmar