Chapter 14

ASSIGNMENT

OBJECTIVE EXCERCISE - 14.1

1. The median of following series if 520, 20, 340, 190, 35, 800, 1210, 50, 80
(A) 1210 (B) 520 (C) 190 (D) 35

2. If the arithmetic mean of 5, 7, 9 x is9 then the value of x is
(A) 11 (B) 15 (C) 18 (D) 16

3. The mode of the distribution 3, 5, 7, 4, 2, 1, 4, 3, 4 is
(A) 7 (B) 4 (C) 3 (D) 1

4. If the first five elements of the set $x_1, x_2,...x_{10}$ are replaced by $x_i + 5$, i = 1, 2, 3, 4, 5 and next five elements are replaced by $x_j - 5$, j = 6, 7, ...10 then the mean will change by
(A) 0 (B) $\frac{n+1}{2}$ (C) 10 (D) 25

5. If the mean and median of a set of numbers are 8.9 and 9 respectively, then the mode will be
(A) 7.2 (B) 8.2 (C) 9.2 (D) 10.2

SUBJECTIVE EXCERCISE - 14.2

1. Find the value of p, if the mean of the following distribution whose mean is 20

x	15	17	19	20 + p	23
f	2	3	4	5p	6

2. Find the mean of following distribution by step deviation method : -

Class interval	50-70	70-90	90-110	110-130	130-150	150-170
No. of workers	18	12	13	27	8	22

Class	0-20	20-40	40-60	60-80	80-100	100-120
Frequency	5	f_1	10	f_2	7	8

3. The mean of the following frequency distribution is 62.8 and the sum of all the frequencies is 50. Compute the missing

4. Calculate the median from the following data :

Rent (in Rs.)	15-25	25-35	35-45	45-55	55-65	65-75	75-85	85-95
No. of House	8	10	15	25	40	20	15	7

5. Find the missing frequencies and the median for the following distribution if the mean is 1.46.

No. of accidents	0	1	2	3	4	5	Total
Frequency (No. of days)	46	f_1	f_2	25	10	5	200

6. If the median of the following frequency distribution is 28.5 find the missing frequencies :

Class interval :	0-10	10-20	20-30	30-40	40-50	50-60	Total
Frequency	5	f_1	20	15	f_2	5	60

7. The marks is science of 80 students of class X are given below : Find the mode of the marks obtained by the students in science.

Class interval :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Frequency	3	5	16	12	13	20	5	4	1	1

8. Find the mode of following distribution :

Class interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	8	7	12	28	20	10	10

9. During the medical check - up of 35 students of a class, their weights were recorded as follows :

Weight (in kg)	Number of students
Less than 38	0
Less than 40	3
Less than 42	5
Less than 44	9
Less than 46	14
Less than 48	28
Less than 50	32
Less than 52	35

Draw a less than type ogive for the given data. Hence, obtain median weight from the graph and verify the result by using the formula.

10. The following table gives the height of trees :

Height	Less than 7	Les than 14	Less than 21	Less than 28	Less than 35	Less than 42	Less than 49	Less than 56
No. of trees	26	57	92	134	216	287	341	360

Draw “less than” ogive and “more than” ogive.

11. If the mean of the following data is 18.75, find the value of p: **[CBSE - 2005]**

x	10	15	p	25	30
f	5	10	7	8	2

12. Find the mean of following frequency distribution **[CBSE - 2006]**

Classes	50-70	70-90	90-110	110-130	130-150	150-170
Frequency	18	12	13	27	8	22

13. Find the median class of the following data : **[CBSE - 2008]**

Marks obtained	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	8	10	12	22	30	18

14. Find the mean, mode and median of the following data : **[CBSE - 2008]**

Classes	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	5	10	18	30	20	12	5