STATISTICS

MEASURE OF CENTRAL TENDENCY (MEAN)

EXERCISE

Q.1 If the mean of n observations ax_1 , ax_2 , ax_3 ,..., ax_n is a X, show that

 $(ax_1 - aX) + (ax_2 - aX) + ... + (ax_n - aX) = 0$

- **Q.2** The mean of 40 observations was 160. It was detected on rechecking that the value of 165 was wrongly copied as 125 for computation of mean. Find the correct mean.
- **Q.3** The mean of 10 numbers is 20. If 5 is subtracted from every number, what will be the new mean?
- **Q.4** Neeta and her four friends secured 65, 78, 82, 94 and 71 marks in a test of mathematics. Find the average (arithmetic mean) of their marks.
- **Q.5** If the mean of 5 observations is 15 and that of another 10 observations is 20, find the mean of all 15 observations
- **Q.6** Find the mean of the following distribution :

x:	4	6	9	10	15
f:	5	10	10	7	8

Q.7 Find the mean of the following distribution :

X	10	30	50	70	89
f	7	8	10	15	10

Q.8 Find the value of p, if the mean of following distribution is 7.5.

x :	3	5	7	9	11	13
y :	6	8	15	Р	8	4

CLASS 9

Q.9 Find the missing frequencies in the following frequency distribution if it is known that the mean of the distribution is 1.46.

Number of accidents (x) :	0	1	2	3	4	5	Total
Frequency (f) :	46	?	?	25	10	5	200

Q.10 Find the mean by direct method.

Mid-values	2	3	4	5	6
Frequencies	49	43	57	38	13

ANSWER KEY

- **2.** 161.
- **3.** X = 15.
- **4**. 78
- **5.** 18.33
- **6.** 9
- **7.** 55
- **8.** p = 3
- 9 $f_1 = 76$ and $f_2 = 38$.
- **10.** 3.615