

STATISTICS

CM111301

1. If \bar{x} is the mean and Mean Deviation from mean is $MD(\bar{x})$, then find the number of observations lying between $\bar{x} - MD(\bar{x})$ and $\bar{x} + MD(\bar{x})$ from the following data : 22, 24, 30, 27, 29, 31, 25, 28, 41, 42.

2. Calculate the mean deviation about median for the following data.

Class	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
Frequency	6	7	15	16	4	2

3. Calculate the mean, variance and standard deviation for the following distribution:

Class	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
Frequency	3	7	12	15	8	3	2

4. The mean and variance of 8 observations are 9 and 9.25 respectively. If six observations are 6,7,10,12,12,13, find the remaining two observations.

5. Calculate the mean and variance for the following data:

Income (in Rs)	1000 - 1700	1700 - 2400	2400 - 3100	3100 - 3800	3800 - 4500	4500 - 5200
No. of families	12	18	20	25	35	10

6. Find the mean and variance for the data.

x_i	6	10	14	18	24	28	30
y_i	2	4	7	12	8	4	3

7. The mean and standard deviation of 20 observations are found to be 10 and 2, respectively. On rechecking, it was found that an observation 8 was incorrect. Calculate the correct mean and standard deviation in each of the following cases:

(i) If wrong item is omitted.

(ii) If it is replaced by 12.

