MATHEMATICS CLASS XI
CHAPTER – 15 STATISTICS

Q.1. The scores of a batsman in 10 innings are 48, 80 , 58, 44, 52, 65, 73, 56, 64, 54. Find the mean deviation from the median.

Q.2. Find the mean deviation from the mean for the following data.

Class	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	6	8	14	16	4	2

Q.3. Find the mean deviation about the mean for the following data.

x_1	2	5	6	8	10	12
f_1	2	8	10	7	8	5

Q.4. Find the mean deviation about the median for the following data.

x_i	3	6	9	12	13	15	21	22
f_i	3	4	5	2	4	5	4	3

Q.5. Find the mean deviation from the median of the following frequency distribution.

Age (in yr)	10	11	12	13	14	15	16
Frequency	3	8	14	19	7	6	3

Q.6. Calculate the mean deviation from the mean of the following distribution.

Marks	0-10	10-20	20-30	30-40	40-50
Number of students	5	8	15	16	6

Address: Plot No 420, Behind Shopprix Mall, Vaishali Sector 5, Ghaziabad – 201010
M: 9999907099, 9818932244 O: 0120-4130999
Website: www.vaishalieducationpoint.com , www.educationsolution.co

Q.7. The mean of 6,8,5,7, a and 4 is 7. Find the mean deviation about median of these observation.

Q.8. Find the mean and standard deviation for the following data.

Age (in yr)	Number of teachers
25-30	30
30-35	23
35-40	20
40-45	14
45-50	10
50-55	3

Q.9. Find the standard deviation and variance of the following data.

x_i	140	145	150	155	160	165	170	175
f_i	4	6	15	30	36	24	8	2

Q.10. Find the missing frequencies in the following distribution it is given that the median of the distribution is 28 and number of observations is 50.

Marks	0-10	10-20	20-30	30-40	40-50
Number of students	5	f_1	15	f_2	6

Q.11. Find the variance and standard deviation for the following distribution.

x_i	4.5	14.5	24.5	34.5	44.5	54.5	64.5
f_i	1	5	12	22	17	9	4

Address: Plot No 420, Behind Shopprix Mall, Vaishali Sector 5, Ghaziabad – 201010
M: 9999907099, 9818932244 O: 0120-4130999
Website: www.vaishalieducationpoint.com , www.educationsolution.co

Q.12. The mean and standard deviation of a group of 100 observations were found to be 20 and 3, respectively. Later on, it was found that three observations were incorrect, which are recorded by 21, 21 and 18. Find the mean and standard deviation, if the incorrect observations are omitted.

Q.12. Calculate the mean and variance for the following data.

Class	0-30	30-60	60-90	90-120	120-150	150-180	180-210
Frequency (f)	2	3	5	10	3	5	2

Q.13. The runs of two players for 10 innings each are as follows.

A	58	59	60	54	65	66	52	75	69	52
B	94	26	92	65	96	78	14	34	98	13

Whom may be regarded as the more consistent player?

Q.14. From the data given below, state which group is more variable?

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Group A	9	17	32	23	40	18	1
Group B	18	22	40	18	32	8	2

Q.15. From a frequency distribution consisting of 18 observations, the mean and the standard deviation were found to be 7 and 4, respectively. But on comparision with the original data, it was found that a figure 12 was miscopied as 21 in calculations. Calculate the correct mean and standard deviation.

Q.16. Find the mean and standard deviation for the following data.

Address: Plot No 420, Behind Shopprix Mall, Vaishali Sector 5, Ghaziabad – 201010
M: 9999907099, 9818932244 O: 0120-4130999
Website: www.vaishalieducationpoint.com , www.educationsolution.co

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Frequency	3	2	4	6	5	5	5	2	8	5

Q.17. A coin is tossed repeatedly until a tail comes up for the first time. Write the sample space for this experiment.

Q.18. A coin is tossed. If it shows head, we throw a die. If it shows a tail, we toss another coin. Describe the sample space.

Address: Plot No 420, Behind Shopprix Mall, Vaishali Sector 5, Ghaziabad – 201010
M: 9999907099, 9818932244 O: 0120-4130999
Website: www.vaishalieducationpoint.com , www.educationsolution.co