

- Q.1 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 were recorded as 21, 21 and 18. Find the mean and standard deviation if the incorrect observations are omitted. (5 marks)

- Q.2 Variance of 48 data is 37.45, find its standard deviation. (1 mark)

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

Marks Obtained	0-10	10-20	20-30	30-40	40-50	50-60
Number of students	6	8	14	16	4	2

- Q.4 From the data given below state which group is more variable, A or B? (5 marks)

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Group A	9	17	32	33	40	10	9
Group B	10	20	30	25	43	15	7

- Q.5 The mean and standard deviation of marks obtained by 50 students of a class in three subjects, Mathematics, Physics and Chemistry are given below:

Subject	Mathematics	Physics	Chemistry
Mean	42	32	40.9
Standard deviation	12	15	20

Which of the three subjects shows the highest variability in marks and which shows the lowest? (3 marks)

- Q.6 Find the mean and variance for the data 6, 7, 10, 12, 13, 4, 8, 12. (3 marks)

- Q.7 Find the mean deviation about the mean for the data (5 marks)

x_i	10	30	50	70	90
f_i	4	24	28	16	8

- Q.8 Find the mean deviation about the mean for the data (3 marks)

4, 7, 8, 9, 10, 12, 13, 17

- Q.9 Define coefficient of variation. (1 mark)

- Q.10 What is range of the following data?
45, 2, 78, 42, 22, 56, 9, 14.

- Q.11 Find the mean and variance for the data (5 marks)

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

- Q.12 An analysis of monthly wages paid to workers in two firms A and B, belonging to the same industry, gives the following results:

	Firm A	Firm B
No. of wage earners	586	648
Mean of monthly wages	Rs 5253	Rs 5253
Variance of the distribution of wages	100	121

(i) Which firm A or B pays larger amount as monthly wages?

(ii) Which firm, A or B, shows greater variability in individual wages? (5 marks)

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- Q.13 The mean and standard deviation of six observations are 8 and 4, respectively. If each observation is multiplied by 3, find the new mean and new standard deviation of the resulting observations. (5 marks)

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- Q.14 What are the various measures of dispersion? (1 mark)

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- Q.15 Find the mean deviation about the median for the data. (5 marks)

13, 17, 16, 14, 11, 13, 10, 16, 11, 18, 12, 17
