SAI TUTORIALS

Date:-23.09.23 Time:- 1 hr
Std:- XI COM Sub:- Maths & stats part-2 ch-1,2 Marks:20

Q. 1. (A) Select and write the correct answer from the given alternatives in each of the following questions : **[3]**

(i) What percentage of observations arranged in ascending order is less than Q_3 ?

(a) 25% (b) 50% (c) 75% (d) 70%

(ii) For a data $D_5 = 121.5$. If -1.5 is subtracted from each observation of data and then divided by 2, then what is the correct value of D_5 ?

(a) 60 (b) 61.5 (c) 62 (d) 61

(iii) If $S = 48$ and $L = 52$, what is coefficient of range?

(a) 4 (b) 0.04 (c) 0.4 (d) 0.004

(B) State whether the following statements are True/False : **[3]**

(i) Quartile deviation is also known as inter-quartile range.

(ii) The value of standard deviation can be negative.

(iii) In a data the number of deciles is 10.

Q.2 Attempt any two of the following **[6]**

1. Calculate all the quartiles for the following frequency distribution :

No. of E-transactions per day	0	1	2	3	4	5	6	7
No. of days	10	35	45	95	64	32	10	9

2. If the 2nd decile of the distribution given below is 13.75, find the missing value.

Mid points	5	15	25	35	45
Frequency	2	?	10	3	2

3. Following data gives the age distribution of 250 employees of a firm. Calculate Q. D. of the distribution.

Age (In years)	20-25	25-30	30-35	35-40	40-45	45-50
No. of employees	30	40	60	50	46	14

Q.3 Attempt any two of the following **[8]**

1. . Compute variance and standard deviation for the following data:

x	15	20	25	30	35	40	45
f	13	12	15	18	17	10	15

2. Given below are the prices of shares of a company for the last 10 days. Find Q. D.: 172, 164, 188, 214, 190, 237, 200, 195, 208, 230

3. For a certain bivariate data, following information is available.

	X	Y
Mean	13	17
S. D.	3	2
Size	10	10

Obtain the combined standard deviation.