Assignment No 1

1) A survey of 36 students of a class was done to find out the mode of transport used by them while commuting to the school. The collected data is shown in the table given below. Represent the data in the form of a bar graph.

Mode of Transport	Number of Students
Cycle	6
School Bus	16
Walking	10
Car	4

2) Data analysis on the following attribute :

13,15,16,16,19,20,20,21,22,22,25,25,25,25,30,33,33,35,35,35,35,36,40,45,46,52,70

a. Mean and median

b. Mode ? comment on data's modality

c. Midrange

d. Five number summary

e. Show the box-plot

3)

A pediatrician has obtained the following table which represents the number of children who begin to walk for the first time at different ages:

Months	Children
9	1
10	4
11	9
12	16
13	11
14	8
15	1

1. Draw the respective frequency plot.

2. Calculate the mode, median, mean and variance.

4)

▪ *The result of throwing two dice 120 times is represented by the table*

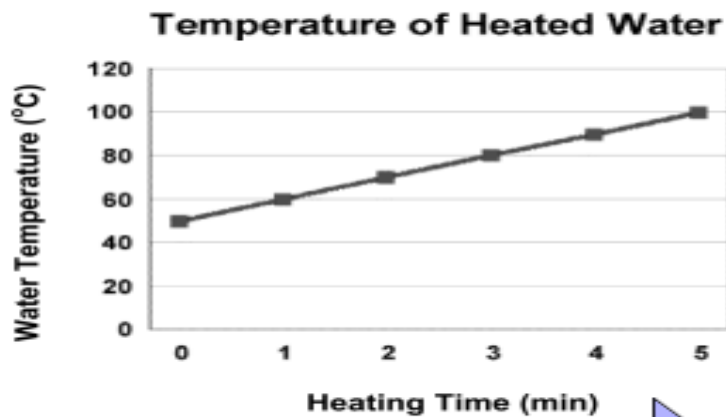| Sums	2	3	4	5	6	7	8	9	10	11	12
No. of Times	3	8	9	11	20	19	16	13	11	6	4

▪ *Calculate the mean and standard deviation.*
▪ *draw the box plot for the above data*

5) Construct a frequency distribution table for the following weights (in gm) of 30 oranges using the equal class intervals, one of them is 40-45 (45 not included). The weights are: 31, 41, 46, 33, 44, 51, 56, 63, 71, 71, 62, 63, 54, 53, 51, 43, 36, 38, 54, 56, 66, 71, 74, 75, 46, 47, 59, 60, 61, 63.

(a) What is the class mark of the class intervals 50-55?

(b) What is the range of the above weights?

(c) How many class intervals are there?

(d) Which class interval has the lowest frequency?

6)

A fifth grade class conducted a 5-minute experiment that involved heating time and water temperature. The results of the experiment are represented in the line graph below.

Temperature of Heated Water

What prediction can be made based on the information gathered?

A. The water temperature remains the same as the heating time continues.

B. The water temperature decreases as the heating time continues.

C. A pattern cannot be determined between these measurements.

D. The water temperature increases as the heating time continues.

7) **The weights of 10 people were recorded in kg as 35, 41, 42, 56, 58, 62, 70, 71, 90, 77. Find the percentile for the weight 58 kg.**

8) The scores for some candidates in a test are 40, 45, 49, 53, 61, 65, 71, 79, 85, 91. What will be the percentile for the score 71?

9) Find the value of the correlation coefficient from the data given in the following table:

SUBJECT	AGE (x)	GLUCOSE LEVEL (y)
1	43	99
2	21	65
3	25	79
4	42	75
5	57	87
6	59	81

10) What is Violin Plot?