

## ASSIGNMENT 1

Answer the following questions:

L.D.S: 23.09.2023

1. Calculate mean and median and mode for the following data:

Class interval	Frequency
140-150	5
150-160	10
160-170	20
170-180	9
180-190	6
190-200	2

2. Calculate mean deviation about mean and standard deviation for the data:

x	f
2	5
3	4
4	7
5	6
6	3

3. The first of two subgroup has 100 items with mean 15 and standard deviation 3. If the whole group has 250 items with mean 15.6 and standard deviation  $\sqrt{13.44}$ , find standard deviation of second group.
4. The results of a bivariate analysis are given in the following form:  
 $\sum x = 30$ ;  $\sum y = 67$ ;  $\sum x^2 = 220$ ;  $\sum y^2 = 1059$ ;  $\sum xy = 480$ ;  $n = 5$
- a. Calculate correlation coefficient between x and y  
b. Determine the two regression lines
5. The following table gives the data of the marks obtained by 7 students in maths and statistics. Compute the rank correlation coefficient.

Marks in mathematics	Marks in statistics
15	40
20	30
28	50
12	30
40	20
60	10
20	30

