Lab 9 : Measures of Central Tendency

Learning Outcome: Student will be able to evaluate the mean, median, mode for the given data.

Blooms Taxonomy Level: BT3

1. In a survey of 35 families in a village, the number of children per family were recorded and the following data was obtained

1	0	2	3	4	5	6
7	2	3	4	0	2	5
8	4	5	12	6	3	2
7	6	5	3	3	7	8
9	7	9	4	5	4	3

Represent the data in the form of a discrete frequency distribution.

2. The marks obtained by 50 students are given below:

31	13	46	31	30	45	38	42	30	9
30	30	46	36	2	41	44	18	29	63
44	30	19	5	44	15	7	25	12	30
6	22	24	37	15	6	39	32	21	20
42	31	19	14	23	28	17	53	22	21

Create a frequency distribution table for the given data.

3. Calculate mean of the series

14100 14150 16080 17120 15200 16160 17400

4. Calculate the arithmetic mean of the marks from the following data by direct method and shortcut method

Marks:	0 – 10	10-20	20-30	30-40	40-50	50-60
No. of students	12	18	27	20	17	6

5. Obtain the value of median from the following data of the monthly income of 10 employees of a company in Rs:

14,391 15,384 25,591 15,407 16,672 26,522 16,777 26,753 27,850 37,490.

6. Find the median of the given grouped data

Age	No of worker
18-22	120
22-26	125
26-30	280
30-34	260
34-38	155

38-42	184
42-46	162
46-50	86
50-54	75
54-58	53
	1500

7. Following is the distribution of marks obtained by 50 students in Statistics. Calculate the median marks.

Marks (More Than)	0	10	20	30	40	50
No. of Students	50	46	40	20	10	3

8. Calculate the mode from the following data

Sl. No.	1	2	3	4	5	6	7	8	9	10
Marks	10	27	24	12	27	27	20	18	15	3

9. Find the mode of the given data

Sales	no of companies
Below 60	12
60-62	18
62-64	25
64-66	30
66-68	10
68-70	5
70-72	2
	102

10. Calculate mode from the following data:

Marks	No. of Students
Above 0	80
Above 10	77
Above 20	72
Above 30	65
Above 40	55
Above 50	43
Above 60	28

Above 70	16
Above 80	10
Above 90	8
Above 1000	0