UNIT- I - MEASURES OF CENTRAL TENDENCY

1) Find arithmetic mean using step-deviation method for the following data also write any three merits of A.M.

Wages :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency :	1	4	10	22	30	35	10	8

2) Calculate Arithmetic mean for the given data:

Wages in (Rs.) :	20-40	40-60	60-80	80-100	100-120
No. of worker :	10	18	23	14	10

3) An analysis of the monthly wages paid to the workers in two firms A and B, belonging to the same industry gives the following result.

	A	B
No. of workers	550	650
Average monthly wages	500	450

Find the combine mean of all 1200 workers of the firm taken together.

4) Calculate Arithmetic mean for the given data:

X :	3	4	6	10	12	13
f :	12	11	15	16	19	17

5) Find median for the following data.

C-I	0-5	5-10	10-15	15-20	20-25
Frequency	15	23	25	22	10

6) Find median for the following data.

A. 12, 30, 20, 15, 10, 35, 58

B. 101, 150, 100, 129, 150, 145, 180, 250, 100, 105, 110, 128

7) Calculate the mode for the given data:

Marks :	20-30	30-40	40-50	50-60	60-70	70-80
No. of students :	5	18	22	20	16	10

8) The mean of 16 items was found to be 30. On rechecking, it was found that two items were wrongly taken as 22 and 18 instead of 32 and 28 respectively. Find the correct mean.

9) The mean of 40 numbers was found to be 38. Later on, it was detected that a number 56 was misread as 36. Find the correct mean of given numbers.

10) Calculate mode from the following data:

Marks	No. of Students
Below 10	4
'' 20	6
'' 30	24
'' 40	46
'' 50	67
'' 60	86
'' 70	96
'' 80	99
'' 90	100

11) The following table gives you the distribution of marks secured by some students in an examination: Find D_2 and P_5

Marks	No. of Students
0—20	42
21—30	38
31—40	120
41—50	84
51—60	48
61—70	36
71—80	31

12) In a moderately skewed distribution, if the value of the mean is 5 and the median is 6, determine the value of the mode.

13) If median = 16, mode = 20. Find the mean.

14) Compute the geometric mean of the following distribution:

Marks :	0-10	10-20	20-30	30-40	40-50
No. of Students:	5	15	25	35	45

15) Find the harmonic mean of the following distribution:

X :	11	12	13	14	15	16
F :	3	7	8	5	2	1