#### Practice Problem Set - Module - 1

### 1. Find the mean of 20, 26, 28, 30, 32.

2. Find the weighted mean of the first n natural numbers, the weights being the corresponding numbers.

3. Obtain the median for the following distribution:

<i>x</i> :	1	2	3	4	5	6	7	8	9
f:	8	10	11	16	20	25	15	9	6

# 4. Find the median wage of the following distribution:

Wages (in Rs.)	2000-3000	3000-4000	4000-5000	5000-6000	6000-7000
No. of workers	3	5	20	10	5

5. What is the mode of the following 1, 2, 2, 2, 3, 3, 4, 4, 5.

## 6. Find the mode of the following:

<i>x</i> :	1	2	3	4	5	6	7	8
<i>f</i> :	4	9	16	25	22	15	7	3

## 7. Find the mode for the following distribution:

Class interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f:	5	8	7	12	28	20	10	10

8. Daily income of ten tamilies of a particular place is given below. Find out Geometric Mean.

85 70 15 75 500 8 45 250 40 30

# 9. Find the G.M. for the data given below:

Marks	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
f:	6	10	18	30	15	12	10	6	2

10. Find the H.M. from the following 2574,475, 75, 5, 0.8, 0.08, 0.005, 0.0009

#### 11. From the following data compute the value of H.M.

Marks	10	20	25	40	50
No. of Students	20	30	50	15	5

12. From the following data compute the value of H.M.:

Class interval	10-20	20-30	30-40	40-50	50-60
<i>f</i> :	4	6	10	7	3

13. Calculate the range and its coefficient from the following data:

Day	Mon	Tue	Wed	Thu	Fri	Sat
Price	200	210	208	160	220	250

14. Calculate the range and its coefficient from the following data:

Marks	10-20	20-30	30-40	40-50	50-60
No. of Students	8	10	12	8	4

15. Find out the value of Q.D. and its coefficient from the following data:

Roll No.	1	2	3	4	5	6	7
Marks	20	28	40	12	30	15	50

16. Compute coefficient of Q.D. from the following data:

Marks	10	20	30	40	50	60
No. of Students	4	7	15	8	7	2

17. Calculate Q.D. and the coefficient of Q.D. from the following data:

Wages	Less than 35	35-37	38-40	41-43	Over 43
No. of wage earners	14	62	99	18	7

18. Calculate the mean deviation and its coefficient for the following data: 4000 4200 4400 4600 4800

19. Calculate mean deviation from the following series:

X	10	11	12	13	14
f	3	12	18	12	3

20. Calculate the standard deviation from the data given below:

Size of item	3.5	4.5	5.5	6.5	7.5	8.5	9.5
f	3	7	22	60	85	32	8

21. Calculate mean and standard deviation of following frequency distribution of marks:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of Students	5	12	30	45	50	37	21

22. The following are some of the particulars of the distribution of weight of boys and girls in a class:

	Boys	Girls
Number	100	50
Mean weight	60 kg	45 kg
Variance	9	4

(a) Find the standard deviation of the combined data.

(b) Which of the two distributions is more variable?

23. The following table shows that monthly expenditures of 80 students of a University on morning breakfast:

Expenditure (in Rs.)	No.of students	Expenditure (in Rs.)	No.of students
78-82	2	53-57	13
73-77	6	48-52	9

68-72	7	43-47	7
63-67	12	38-42	4
58-62	18	33-37	2

Calculate arithmetic mean, standard deviation and coefficient of variation of the above data.