

SNS ACADEMY

Statistics

10th Standard

Maths

Date : 02-Feb-23

Exam Time : 00:02:00 Hrs

Reg.No. :

Total Marks : 25

4 x 2 = 8

1) The regarding marks obtained by 48 students of a class in a class test is given below. Calculate the modal marks of students.

MARKS OBTAINED	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50
NUMBER OF STUDENTS	1	0	2	0	0	10	25	7	2	1

2) Find the mean of the following distribution

CLASS INTERVAL	0-6	6-12	12-18	18-24	24-30
FREQUENCY	5	4	1	6	4

3) Find x and y from the following cumulative frequency distribution

CLASSES	FREQUENCY	C.F
0-8	15	15
8-16	x	28
16-24	15	43
24-32	18	y
32-40	09	70

4) Find the mode of the following frequency distribution

CLASSES	0-6	6-12	12-18	18-24	24-30
FREQUENCY	7	5	10	12	6

4 x 4 = 16

5) The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is RS.18. Find the missing frequency f.

DAILY POCKET ALLOWANCE (IN RS)	NUMBER OF CHILDREN
11-13	7
13-15	6
15-17	9
17-19	13
19-21	f
21-23	5
23-25	4

6) To find out the concentration of SO₂ in the air (in parts per million, i.e, ppm), the data was collected for 30 localities in a certain city and its presented below:

CONCENTRATION OF SO ₂ (IN PPM)	FREQUENCY
0.00-0.04	4
0.04-0.08	9
0.08-0.12	9
0.12-0.16	2
0.16-0.20	4
0.20-0.24	2

Find the mean concentration of SO₂ in the air.

7) If median of the distribution given below is 28.5, then find the values of x and y.

CLASS INTERVAL	FREQUENCY
0-10	5
10-20	x
20-30	20
30-40	15
40-50	y
50-60	5
Total	60

8) Calculate the mode of the following frequency distribution table.

MARKS	NUMBER OF STUDENTS
25 or more than 25	52
35 or more than 35	47
45 or more than 45	37
55 or more than 55	17
65 or more than 65	8
75 or more than 75	2
85 or more than 85	0
