## T3-Data Handling Model Question Paper IX

## 8th Standard

Maths

Reg.No.:

| I. Answer | all | the | questions |
|-----------|-----|-----|-----------|
|-----------|-----|-----|-----------|

Time : 01:45:00 Hrs

Total Marks : 40 5 x 2 = 10

1) Consider the following data:

15, 17, 17, 20, 15, 18, 16, 25, 16, 15, 16, 18, 20, 28, 30, 27, 18, 18, 20, 25, 16, 16, 20, 28, 15, 18, 20, 20, 20, 25.

2) Draw a histogram for the following table which represent the marks obtained by 100 students in an examination:

Part-A

| Mark      | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|
| Number of | 5    | 10    | 15    | 20    | 25    | 12    | Q     | 5     |
| Students  | 5    | 10    | 1.5   | 20    | 25    | 12    | 0     | 5     |

3) Draw a frequency polygon imposed on the histogram for the following distribution Class Interval 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90

| E         |   | c | 0 | 10 | 10 |    | - | - |
|-----------|---|---|---|----|----|----|---|---|
| Frequency | 4 | 6 | 8 | 10 | 12 | 14 | 1 | 5 |
|           |   |   |   |    |    |    |   |   |

| 4) | The S.S.L.C Public Examination result of a school is as follows: |                 |       |                        |                 |         |        |  |  |  |
|----|--|-----------------|-------|------------------------|-----------------|---------|--------|--|--|--|
|    | Result   | Passed in first | Class | Passed in second class | Passed in thire | d class | Failed |  |  |  |
|    | Percentage of  | 25%             |       | 35%                    | 30%             |         | 10%    |  |  |  |
|    | students   | 2370            |       | 55%                    | 5070            |         | 1070   |  |  |  |

Draw a pie chart to represent the above information.

5) Find the weighted A. M of the price for the following data:

| Food stuff | Quantity (in kg) $w_i$ | Price per kg (in RS) $w_i$ |
|------------|------------------------|----------------------------|
| Rice       | 25                     | 30                         |
| Sugar      | 12                     | 30                         |
| Oil        | 8                      | 70                         |

Part-B

- 6) Draw a histogram with the help of the following table Yield per acer (Quintal) 11-15 16-20 21-25 26-30 31-35 36-40 Number of rice field 3 5 18 15 6 4
- 7) In a study of diabetic patients in a village, the following observations were noted

   Age (in year)
   10-20 20-30 30-40 40-50 50-60 60-70

   Number of spectators
   6
   13
   20
   10
   5

Represent the above data by a frequency polygon using histogrConstruct a histogram and frequency polygon for the following dataam.

8) Construct a frequency polygon from the following data using histogram.

|                |      |       |       |       |       |       |       |       |       | <u> </u> |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| Mark           | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100   |
| No of Students | 9    | 3     | 4     | 6     | 2     | 3     | 4     | 5     | 7     | 8        |

9) Mr. Rajan Babu spends 20% of his income on house rent, 30% on food and 10% for his children's education. He saves 25%, while the remaining is used for other expenses. Make a pie chart exhibiting the above information.

10) If the average of the values 18, 41, x , 36, 31, 24, 37, 35, 27, 36, is 31. Find the value of x.

11) The average height of 20 students in a class was calculated as 160 cm. On verification it was found that one reading was wrongly recorded as 132 cm instead of 152 cm. Find the correct mean height.

12) Find the mode of the following data:

55, 51, 62, 71, 50, 32.

13) Find the mode of the following data:

24, 20, 27, 32, 20, 28, 20.

14) The age of the employees of a company are given below

|                   | _  | _  | 23 | _  | _  | _  | _  |
|-------------------|----|----|----|----|----|----|----|
| Number of persons | 13 | 15 | 20 | 18 | 16 | 17 | 13 |

Find the mean, median and mode.

15) Find the median of the following set of values:

70, 71, 70, 68, 67, 69, 70.

10 x 3 = 30