# T3-Data Handling <br> Model Question Paper IX 

8th Standard
Maths
Reg.No.


## I. Answer all the questions

Time : 01:45:00 Hrs

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:

| Mark | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of <br> Students | 5 | 10 | 15 | 20 | 25 | 12 | 8 | 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 60-7070-80 80-90
Frequency
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 third class | Failed |
| :--- | :--- | :--- | :--- | :--- |
| Percentage of <br> students | $25 \%$ | $35 \%$ | $30 \%$ | $10 \%$ |

Draw a pie chart to represent the above information.
5) Find the weighted $\mathrm{A} . \mathrm{M}$ of the price for the following data:

Food stuff Quantity (in kg) $w_{i} \mid$ 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 $31-3536-40$

| 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 3 | 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.

| 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

| Age(in years) | $1921232527 \mid 2931$ |
| :--- | :--- | :--- |

Number of persons 13152018161713
Find the mean, median and mode.
15) Find the median of the following set of values:
$70,71,70,68,67,69,70$.

