

**BAL BHARTI PUBLIC SCHOOL**

Ganga Ram Hospital Marg

Subject : Mathematics

SA (2)

Class – VIII

Assignment No. – 16

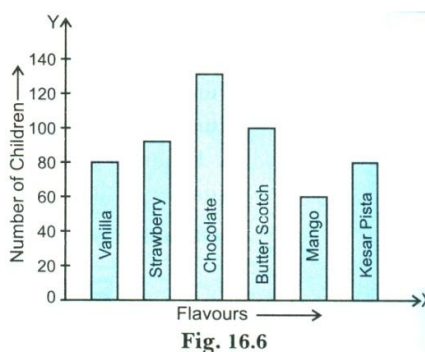
Chapter 15 – Data Handling

Q.1 Fill in the blanks

- The collection of numerical facts in a particular context is called \_\_\_\_\_.
- The difference between the highest and the lowest values of observations in a data is called \_\_\_\_\_.
- The number of times an observation occurs is called \_\_\_\_\_.
- Tally marks for 13 are given by \_\_\_\_\_.
- A character which is capable of taking several different values is called a \_\_\_\_\_.
- The possible results of a random experiment are called \_\_\_\_\_.
- One or more outcomes of an experiment make an \_\_\_\_\_.
- Probability of an impossible event is \_\_\_\_\_.
- Probability of a sure event is \_\_\_\_\_.

Q.2 The taste for different flavours of ice creams among the children of a society is depicted in the bar graph in Fig. 16.6. Study it and answer the following questions :

- What is the scale along vertical axis?
- Which flavor is the most popular among the children?
- How many children like to have Vanilla ice cream?
- Write in decreasing order, the number of children preferring different flavours of ice cream.
- What percentage of children like to have Mango ice cream?



Q.3 The bar graph given in Fig. 16.8 shows the number of tourists who visited the different hill stations during the vacations in a particular year. Study the bar graph and answer the following questions :

- Write the scale along the horizontal axis.
- Which hill station was visited by maximum number of tourists?
- How many tourists visited Darjeeling?
- How many more tourists visited Nainital as compared to Mussoorie?
- From the most visited hill station to the least visited one, write the hill stations in order.

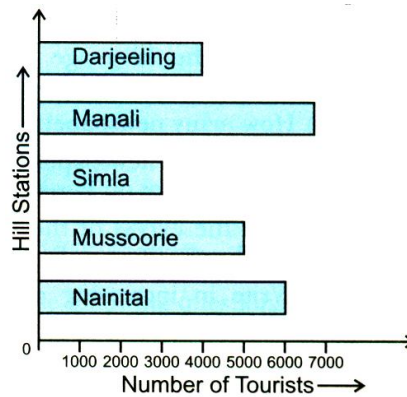


Fig. 16.8

- Q.4 The marks obtained by 40 students of a class in an examination are given below :  
 8, 47, 22, 31, 17, 13, 38, 26, 3, 34, 29, 11, 22, 7, 15, 24, 38, 31, 21, 35, 42, 24, 45, 23,  
 21, 27, 29, 49, 25, 48, 15, 18, 27, 19, 45, 14, 34, 37, 34, 21.  
 Prepare a frequency distribution table, starting with a class interval 0 – 10 (where 10 is not included), etc.

- Q.5 Yearly savings (in rupees) of 30 students of class VIII are as under :

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 38 | 42 | 40 | 35 | 72 | 27 | 57 | 40 |
| 59 | 80 | 84 | 73 | 65 | 40 | 76 | 44 |
| 38 | 60 | 58 | 38 | 54 | 39 | 50 |    |
| 71 | 83 | 45 | 38 | 80 | 77 | 62 |    |

Construct a frequency table with 30-35 as one of the class intervals (35 not included).

- Q.6 Given below is the frequency distribution of the heights of 50 players of a school :

| Class Intervals | 140-145 | 145-150 | 150-155 | 155-160 | 160-165 |
|-----------------|---------|---------|---------|---------|---------|
| Frequency       | 6       | 12      | 18      | 9       | 5       |

Draw a histogram representing the above data.

- Q.7 The histogram (Fig. 16.13) depicts the marks of 40 students of class VIII obtained in a test of mathematics :

(Look at the histogram and answer the following questions :

- What is the class size?
- How many students obtained less than 5 marks?
- How many students obtained 20 or more marks but less than 25?
- If 25 or more marks make first division, how many first divisions are there?
- How many students obtained 10 or more but less than 20 marks?

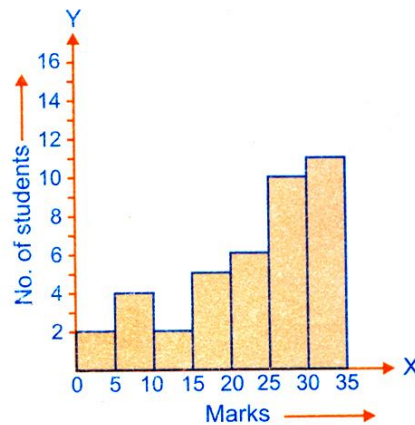


Fig. 16.13

Q.8 The histogram (Fig. 16.14) show the distribution of ages (in years) of 38 teachers in a school. Look at the histogram and answer the questions that follow :

- In which age group maximum number of teachers are there and what is their number?
- What is the number of teachers having their ages 25 years or more but less than 30?
- How many teachers are of the age 40 or more?
- What is the class size?
- What are the class marks of the classes?

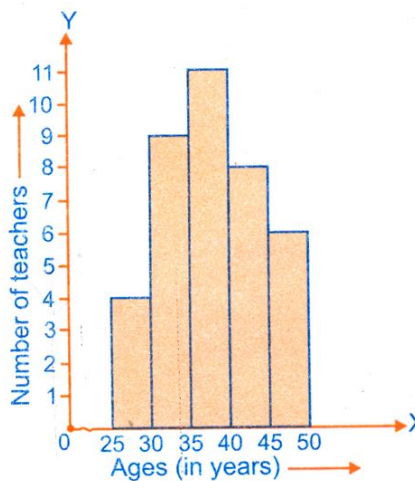


Fig. 16.14

Q.9 Monthly income of a family is Rs. 12,0000. The adjoining pie chart (Fig. 16.18) shows how the family used the money. Study the pie chart and answer the following questions.

- How much was spent on food?
- How much was spent on education?
- How much does the family save?
- how much was spent on rent and bills?
- Find the ratio of the amount spent on other items to that spent on food.

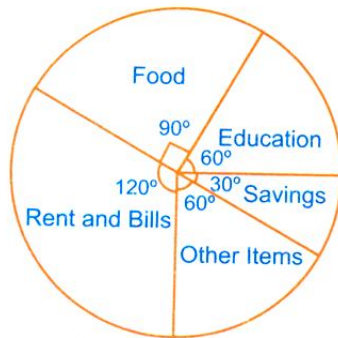


Fig. 16.18

Q.10 180 people donated money in the following organization.

| Organization  | NGO | Blind School | Old Age Home | Orphanage Home | Total |
|---------------|-----|--------------|--------------|----------------|-------|
| No. of People | 72  | 40           | 37           | 31             | 180   |

- (a) Represent this information using a pie chart.
- (b) Do you think it is a good gesture to donate money? If yes, write one incidence when you donate money or something for the poor and needy.

Q.11 Akash rolls a die. What are the chances of getting a number :

- (i) less than 7                      (ii) less than 1                      (iii) which is even?

Q.12 Toss two coins together. Write all the possible outcomes and then find the probability of getting tail on both the coins.

Q.13 Using the probability scale, write the probability of each of the following :

- Next year, the Christmas Day will be on 25<sup>th</sup> December.
- There will be 29 days in February in the year 2006.
- Students of class VIII will go for a picnic.
- India will win the one day cricket match played between India and Australia.
- You get an odd number on throwing a dice.
- Independence Day will be celebrated on 15<sup>th</sup> August.
- You will score above 80% marks in the annual exams, if you have worked hard and the level of paper is easy.
- Today Earth will not rotate on its axis.

Q.14 The following data relates to the expenditure of the families A and B per month.

| Item of Expenditure | Family A | Family B |
|---------------------|----------|----------|
| Food                | 4000     | 4536     |
| Rent                | 500      | 532      |
| Clothing            | 800      | 868      |
| Education           | 2000     | 2380     |
| Saving              | 1260     | 504      |
| Miscellaneous       | 500      | 1260     |

Represent the expenditure of the families A and B by Pie Chart.