Subject : Mathematics SA (2) Class – VIII Assignment No. – 6 Chapter 15 – Data Handling

- Q.1 Fill in the blanks
 - (a) The collection of numerical facts in a particular context is called _____
 - (b) The difference between the highest and the lowest values of observations in a data is called ______.
 - (c) The number of times an observation occurs is called ______.
 - (d) Tally marks for 13 are given by ____
 - (e) A character which is capable of taking several different values is called a
 - (f) The possible results of a random experiment are called ______.
 - (g) One or more outcomes of an experiment make an _____.
 - (h) Probability of an impossible event is _____.
 - (i) 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 :
 - (i) What is the scale along vertical axis?
 - (ii) Which flavor is the most popuar among the children?
 - (iii) How many children like to have Vanilla ice cream?
 - (iv) Write in decreasing order, the number of children preferring different flavours of ice cream.
 - (v) 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 :
 - (i) Write the scale along the horizontal axis.
 - (ii) Which hill station was visited by maximum number of tourists?
 - (iii) How many tourists visited Darjeeling?
 - (iv) How many more tourists visited Nainital as compared to Mussoorie?
 - (v) From the most visited hill station to the least visited one, write the hill stations in order.



- 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 :

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



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



- 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.
 - (i) How much was spent on food?
 - (ii) How much was spent on education?
 - (iii) How much does the family save?
 - (iv) how much was spent on rent and bills?
 - (v) Find the ratio of the amount spent on other items to that spent on food.



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

| Organization | NGO | Blind | Old Age | Orphanage | Total |
|---------------|-----|--------|---------|-----------|-------|
| | | School | Home | Home | |
| 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.11Akash 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 :
 - (i) Next year, the Christmas Day will be on 25th December.
 - (ii) There will be 29 days in February in the year 2006.
 - (iii) Students of class VIII will go for a picnic.
 - (iv) India will win the one day cricket match played between India and Australia.
 - (v) You get an odd number on throwing a dice.
 - (vi) Independence Day will be celebrated on 15th August.
 - (vii) You will score above 80% marks in the annual exams, if you have worked hard and the level of paper is easy.
 - (viii) 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.