# Mathematics

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**(Chapter – 9) (Data Handling) (Practice Test 5)**

**(Class VI)**

**Time: 1 Hour 15 minutes** **M. M: 25**

**General Instructions:**

- This question paper contains four sections: A, B, C and D. Each part is compulsory.
- Section A has 5 MCQ of one mark each.
- Section B has 3 questions of two marks each.
- Section C has 3 questions of three marks each.
- Section D has 2 questions of five marks each, attempt any 1 out of 2.
- There is no negative marking.

## Section – A

1. Using tally marks, which one of the following represents the number eight:

(A) ||||| ||| (B) 𝍸 ||| (C) 𝍸 || (D) 𝍸 |||

2. The marks (out of 10) obtained by 28 students in a Mathematics test are listed as below:

8, 1, 2, 6, 5, 5, 5, 0, 1, 9, 7, 8, 0, 5, 8, 3, 0, 8, 10, 10, 3, 4, 8, 7, 8, 9, 2, 0

The number of students who obtained marks more than or equal to 5 is

(A)13 (B) 15 (C) 16 (D) 17

3. In question 2 above, the number of students who scored marks less than 4 is

(A)15 (B) 13 (C) 12 (D) 10

4. The choices of the fruits of 42 students in a class are as follows:

A,O , B , M , A , G , B , G , A , G ,B , M , A , G , M , A , B , G , M , B , A , O , M , O , G , B , O , M , G , A , A , B , M , O , M , G , B , A , M , O , M , O, where A, B, G, M and O stand for the fruits Apple, Banana, Grapes, Mango and Orange respectively.

Which two fruits are liked by an equal number of students?

(A) A and M (B) M and B (C) B and O (D) B and G

5. According to data of question 4, which fruit is liked by most of the students?

(A) O (B) G (C) M (D) A

## Section – B

6. State True and False. In a pictograph, if a symbol represents 50 books in a library shelf, then the symbol represents 25 books.

7. In a bar graph, bars of _____ width can be drawn horizontally or vertically with _____ spacing between them.

8. Define: Frequency distribution.

## Section – C

9. On the scale of 1-unit length = 10 crores, the bar of length 6 units will represent _____ crore and of _____ units will represent 75 crores.

10. Explain the reading and interpretation of bar graphs.

11. Define the following terms:

(i) Observation (ii) data (iii) Frequency of an observation

## Section – D

12. In an examination, the grades achieved by 30 students of a class are given below. Arrange these grades in a table using tally marks: B, C, C, E, A, C, B, B, D, D, D, D, B, C, C, C, A, C, B, E, A, D, C, B, E, C, B, E, C, D

13. The lengths in centimeters (to the nearest centimeter) of 30 carrots are given as follows: 15, 22, 21, 20, 22,15, 15, 20, 20,15, 20, 18, 20, 22, 21, 20, 21, 18, 21, 18, 20, 18, 21, 18, 22, 20, 15, 21, 18, 20

Arrange the data given above in a table using tally marks and answer the following questions.

(a) What is the number of carrots which have length more than 20 cm?

(b) Which length of the carrots occur maximum number of times? Minimum number of times?

## Answers

### Section – A

1. 𝍸 |||
2. 17
3. 10
4. B and G
5. M

### Section – B

6. It is true that in a pictograph, if a symbol represents 50 books in a library shelf, then the symbol represents 25 books. So, given statement is True.

7. Bars of uniform width can be drawn horizontally or vertically with equal spacing between them in a bar graph.
In a bar graph, bars of uniform width can be drawn horizontally or vertically with equal spacing between them.
8. A frequency distribution is an arrangement of instances in which a variable takes each of its possible values. A frequency distribution depicts a summarized grouping of data divided into mutually exclusive classes and the number of occurrences in those classes.

### Section-C

9. If 1-unit length = 10 crores, then 6 units = 60 crores.
Since 10 crore = 1 unit, therefore 75 crores = 7.5 units
On the scale of 1-unit length = 10 crores, the bar of length 6 units will represent 60 crore and of 7.5 units will represent 75 crores.

10. A bar graph is a graph with its length proportional to the value it represents. The bars in a bar graph can be plotted vertically or horizontally. A bar graph is a visual display used to compare the amount or frequency of occurrence of different characteristics of data.
Bar graph allows us to:
(i) Compare groups of data
(ii) Generalize about the data quickly
11. (i) Observation is the active acquisition of information from a primary source.
(ii) A collection of facts such as values measurements are called data.
(iii) Number of times an observation has occurred in a given data.

### Section – D

12. Representation of Grades A, B, C, D and E using tally marks is shown below:

| Grades | Tally Marks | Number of Students |
|---|---|---|
| A | ||| | 3 |
| B | 𝍸 || | 7 |
| C | 𝍸 𝍸 | 10 |
| D | 𝍸 | | 6 |
| E | |||| | 4 |

13. Given data arranged in a table using tally marks is shown below:

| Length in cm | Tally Marks | No. of carrots |
|---|---|---|
| 15 | 𝍸 | 5 |
| 18 | 𝍸 \| | 6 |
| 20 | 𝍸 \|\|\|\| | 9 |
| 21 | 𝍸 \| | 6 |
| 22 | \|\|\|\| | 4 |

(a) The number of carrots which have length more than 20 cm is given by = 6+4 = 10

(b) Length of the carrots occurs maximum number of times is 20 cm and length of the carrots occurs minimum number of times is 22 cm.