# CBSE Sample Paper class 6 Maths Set 2 

SUBJECT: MATHEMATICS
MAX. MARKS : 80
CLASS : VI
DURATION : 3 HRS

## General Instructions:

(i). All questions are compulsory.
(ii). This question paper contains $\mathbf{3 0}$ questions divided into four Sections A, B, C and D.
(iii). Section A comprises of 6 questions of $\mathbf{1}$ mark each. Section $\mathbf{B}$ comprises of 6 questions of $\mathbf{2}$ marks each. Section C comprises of 10 questions of $\mathbf{3}$ marks each and Section D comprises of 8 questions of 4 marks each.
(iv). Use of Calculators is not permitted

## SECTION - A

1. The length of a young gram plant is 65 mm . Express its length in cm .
2. Meera went to a park 150 m long and 80 m wide. She took one complete round on its boundary. What is the distance covered by her?
3. Find the ratio of 90 cm to 1.5 m .
4. Write two negative integers greater than -20 .
5. A bird flies 1 kilometer in one minute. Express the distance covered by the bird in terms of its flying time in minutes?
6. The following are the number of electric bulbs purchased for a lodging house during the first four months of a year. (Each bulb symbol represent 10 bulbs.) Find the numbers of bulbs purchased during April.


## SECTION - B

7. With PQ of length 6 cm as diameter, draw a circle.
8. Write the letters of the word 'MATHEMATICS' which have no line of symmetry.
9. Find the rule, which gives the number of matchsticks required to make matchstick pattern of letter $U$ as II. Use a variable to write the rule.
10. Two sides of a triangle are 22 cm and 28 cm . The perimeter of the triangle is 70 cm . What is its third side?
.1. There are 45 persons working in an office. If the number of females is 25 and the remaining are males, find the ratio of :
(a) The number of females to number of males.
(b) The number of males to number of females.
11. Following is the choice of sweets of 30 students of Class VI.

Ladoo, Barfi, Ladoo, Jalebi, Ladoo, Rasgulla, Jalebi, Ladoo, Barfi, Rasgulla, Ladoo, Jalebi, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo, Rasgulla, Ladoo, Ladoo, Barfi, Rasgulla, Rasgulla, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo.
(a) Arrange the names of sweets in a table using tally marks.
(b) Which sweet is preferred by most of the students?

## SECTION - C

13. Using the number line write the integer which is:
(a) 3 more than 5
(b) 5 more than -5
(c) 6 less than 2
14. Draw a circle of radius 4 cm . Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet?
15. Subtract :
(a) Rs 5.36 from Rs 8.40
(b) 2.051 km from 5.206 km
16. Vandana wants to cover the floor of a room 6 m wide and 8 m long by squared tiles. If each square tile is of side 0.5 m , then find the number of tiles required to cover the floor of the room.
17. Present age of father is 42 years and that of his son is 14 years. Find the ratio of
(a) Age of the father to the age of son, when son was 12 years old.
(b) Age of father after 10 years to the age of son after 10 years.
(c) Age of father to the age of son when father was 30 years old.
18. The following are the number of electric bulbs purchased for a lodging house during the first four months of a year.

| Months | January | February | March | April |
| :--- | :---: | :---: | :---: | :---: |
| No. of bulbs | 20 | 24 | 30 | 34 |

Represent the details by a pictograph.
19. Consider the letters of English alphabets, A to Z. List among them the letters which have
(a) vertical lines of symmetry
(b) horizontal lines of symmetry
(c) no lines of symmetry
20. Sweety runs around a square park of side 75 m . Bulbul runs around a rectangular park with length 60 m and breadth 45 m . Who covers less distance?
21. Cost of 105 envelopes is Rs 35 . How many envelopes can be purchased for Rs 10 ?
22. Give expressions in the following cases:
(a) 12 subtracted from $z$
(b) $n$ multiplied by 2 and 1 subtracted from the product
(c) y multiplied by 10 and then 7 added to the product

## SECTION - D

## 23. Construct with ruler and compasses, angles of following measures: (a) $30^{\circ}$ (b) $45^{\circ}$

24. Following table shows the number of bicycles manufactured in a factory during the years 1998 to 2002. Illustrate this data using a bar graph. Choose a scale of your choice.

| Years | Number of bicycles manufactured |
| :---: | :---: |
| 1998 | 800 |
| 1999 | 600 |
| 2000 | 900 |
| 2001 | 1100 |
| 2002 | 1200 |

(a) In which year were the maximum numbers of bicycles manufactured?
(b) In which year were the minimum numbers of bicycles manufactured?
25. Bob wants to cover the floor of a room 3 m wide and 4 m long by squared tiles. If each square tile is of side 0.5 m , then find the number of tiles required to cover the floor of the room.
26. Form four expressions using y, 2 and 7. Every expression must have y in it. Use only two number operations. These should be different.
27. Complete the table and by inspection of the table find the solution to the equation $\mathrm{m}+10=16$.

| m | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{~m}+10$ |  |  |  |  |  |  |  |  |  |

28. A truck requires 108 litres of diesel for covering a distance of 594 km . How much diesel will be required by the truck to cover a distance of 1650 km ?
29. Determine if the following ratios form a proportion. Also, write the middle terms and extreme terms where the ratios form a proportion.
(a) $25 \mathrm{~cm}: 1 \mathrm{~m}$ and Rs $40:$ Rs 160
(b) 39 litres : 65 litres and 6 bottles : 10 bottles
30. By splitting the following figures into rectangles, find their areas

