## Kendriya Vidyalaya Sangathan Bengaluru Region

## Summative Assessment-II- March 2014

Class: VIII
Time: $2 ½$ HRS
Subject: Mathematics
Marks: 60

## General Instructions

1. All questions are compulsory.
2. The question paper consists of 4 sections $A, B, C$ and $D$.

Section A contains 8 questions of 1 mark each.
Section B contains 6 questions of 2 marks each.
Section C contains 8 questions of 3 marks each.
Section D consists of 4 questions of 4 marks each.
3. Two graphs are to be attached.

## Section A

1 When a die is thrown, the probability of getting a prime number is $\qquad$
(a) $\frac{1}{2}$
(b) 1
(c) $\frac{1}{6}$
(d) -1

2 The ratio of 5 m to 10 km is $\qquad$
(a) $1: 5$
(b) $1: 2$
(c) $2: 10$
(d) 1:5

3 Volume of a cuboid with length $\mathbf{5 a}$, breadth $\mathbf{3 a}{ }^{\mathbf{2}}$ and height $\mathbf{2} \mathrm{a}^{4}$ is $\qquad$
(a) $30 a$
(b) $30 a^{7}$
(c) $15 a^{5}$
(d) $10 a^{6}$

4 A polyhedron having 8 vertices and 12 edges will have $\qquad$ faces.
(a) 4
(b) 8
(c) 6
(d) 2

5 Area of a parallelogram whose base is 15 cm and corresponding height 8 cm is $\qquad$
(a) $60 \mathrm{~m}^{2}$
(b) $120 \mathrm{~cm}^{2}$
(c) $60 \mathrm{~cm}^{2}$
(d) $120 \mathrm{~cm}^{2}$

6
$4^{-2}=$ $\qquad$
(a) $\frac{1}{16}$
(b) $\frac{1}{4}$
(c) $\frac{-1}{16}$
(d) 16
$\qquad$
(a) $4 a b c$
(b) 2 ab
(c) $8 a$
(d) 2 a

8
If $34 y 5$ is a multiple of 9 , then $\mathbf{y}$ is $\qquad$
(a) 0
(b) 3
(c) 9
(d) 6

## Section B

9 Add $3 y(y-4 m+5 n)$ and $4 y(10 n-3 m+2 y)$
10 Draw the side view and top view of a cylinder.
11 Find the value of $\left(2^{-3} \times 2^{2}\right) \div 2^{0}$
12 Factorise $p^{2}+10 p+25$
13 Factorise $x^{2} y z+x y^{2} z+x y z^{2}$
14 Find the value of the letters in the following.
12 A
$+6 \mathrm{AB}$
A 09

## Section C

Draw the top view, front view and side view of the given solid


A wooden cuboidal box has the external dimensions $3.5 \mathrm{~m}, 2 \mathrm{~m}$, and 1.5 m . All the sides of the box are to be painted. Find the area of the box that needs to be painted.

19 A machine fills 850 bottles of soft drink in 5 hours. How many bottles will it fill in 8 hours?

A school has 8 periods a day each of 45 minutes duration. How long would each period be if the school has 9 periods a day if the school hours remain the same?

Work out the following division

$$
4 y x\left(x^{2}+6 x-16\right) \div 2 y(x+8)
$$

22 The table show the colours preferred by the group of people. Draw a pie chart showing the following information.

| Colours | Number of people |
| :--- | :--- |
| Blue | 18 |
| Green | 9 |
| Red | 6 |
| Yellow | 3 |
| Total | 36 |

## Section D

Plot the following points on a graph sheet.
$A(1,1), B(2,2), C(3,3), D(4,4)$

26 Weight of 20 students in a class in kilograms is as follows.
$40,41,43,48,49,50,54,52,54,50,53,42,48,50,48,52,53,51,52,50$
Group the given data and represent it as a histogram taking class intervals 40-45, 45-50 and so on.

