INDIAN SCHOOL SOHAR
MATHEMATICS
Date: 22-01-2014
Class: VIII

Time: 45mnts
Marks: 25

General Instructions:

- All questions are compulsory.
- Section A comprises 3 questions of 1 mark each.
- Section B comprises 4 questions of 2 marks each.
- Section C comprises 2 questions of 3 marks each.
- Section D comprises 2 questions of 4 marks each.


## SECTION A

1. The area of a rhombus is $240 \mathrm{sq} . \mathrm{cm}$ and one of the diagonal is 16 cm . Find the other diagonal.
(a) 30 cm
(b) 15 cm
(c) 12 cm
(d) 25 cm
2. Find the value of $\left(5^{0}+6^{0}+8^{0}\right)^{-4}$
(a) 27
(b) 1
(c) $\frac{1}{81}$
(d) $-\frac{1}{81}$
3. Find the value of
(a) 27
(b) 72
(c) 9
(d) -27

## SECTION B

4. Write the standard form of (a) 0.00000000467 (b) 310900000000
5. Find " $m$ " so that $\left(\frac{3}{7}\right)^{3} \times\left(\frac{3}{7}\right)^{-6}=\left(\frac{3}{7}\right)^{2 m-1}$

6 . Find the surface area of a cube whose edge is 6 m .
7. Simplify; $\left(3^{2}-2^{2}\right) \times\left(\frac{2}{3}\right)^{-3}$

## SECTION C

8. Find the volume of a cylinder, if the diameter of its base is 21 cm and its height is 10 cm .
9. Simplify; $\left\{\left(\frac{2}{3}\right)^{2}\right\}^{3} \times\left(\frac{1}{3}\right)^{-4} \times 3^{-1} \times 6^{-1}$

## SECTION D

10. The lateral surface area of a hollow cylinder is $4224 \mathrm{~cm}^{2}$. It is cut along its height and formed a rectangular sheet of width 33 cm . Find the perimeter of the rectangular sheet.
11. The floor of a rectangular hall has a perimeter of 250 m . If its height is 6 m , find the cost of painting its four walls (including doors and windows) at the rate of Rs 6 per sq. m.
