## INDIAN SCHOOL SOHAR SUMMATIVE ASSESSMENT1-2013-14

Date: 16.03.2014
Marks: 60
Class: VIII
General Instructions:
All questions are compulsory
$>$ The question paper consists of 18 questions divided into 4 sections $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D. Section-A comprises of 10 questions of 1 mark each, Section-B comprises of 6 questions of 2 marks each, Section-C comprises of 6 questions of 3 marks each and Section-D comprises of 5 questions of 4 marks each.
Question numbers 1 to 10 in Section-A are multiple choice questions where you are to select one correct option out of the given four.

## SECTION-A

To fill up the blanks choose the most suitable answers from the options given.

1. i) The ratio of 5 m to 7 km is $\qquad$
a) $5: 7$
b) $5: 700$
c) $1: 140$
d) $1: 1400$
ii) A shop gives 5\% discount. Then the sale price of a bag marked at Rs 55000 will be $\qquad$
a) 27500
b) 5500
c) 52250
d) 50000
iii) Sum of $a-b+a b, b-c+b c, c-a+a c$ is $\qquad$
a) $a b+b c+a c$
b) 2 abc
c) $a+b+c$
d) $a^{2} b^{2} c^{2}$
iv) The area of a rhombus with diagonals 9 cm and 6 cm is $\qquad$
a) $54 \mathrm{sq} . \mathrm{cm}$
b) $27 \mathrm{sq} . \mathrm{cm}$
c) $54 \mathrm{sq} . \mathrm{m}$
d) $27 \mathrm{sq} . \mathrm{m}$
v) The volume of a cube of side 2.5 cm is $\qquad$
a) $6.25 \mathrm{cu} . \mathrm{cm}$
b) $25 \mathrm{sq} . \mathrm{cm}$
c) $37.5 \mathrm{sq} . \mathrm{cm}$
d) $15.625 \mathrm{cu} . \mathrm{cm}$
vi) The multiplicative inverse of $7^{-5}$ is $\qquad$
a) $-7^{-5}$
b) $7^{5}$
c) $\left(\frac{1}{7}\right)^{5}$
d) $-7^{5}$
vii) The standard form of 0.00000000675 is $\qquad$
a) $6.75 \times 10^{-9}$
b) $6.75 \times 10^{9}$
c) $675 \times 10^{-11}$
d) $675 \times 10^{-7}$
viii) An electric pole 12 m high casts a shadow of 6 m . The height of a tree that casts a shadow of 9 m at the same moment is $\qquad$
a) 4.5 m
b) 8 m
c) 18 m
d) 10 m
ix) The factorisation of $12 x+27$ is $\qquad$
a) $3(x+9)$
b) $3(x+27)$
c) $12(x+27)$
d) $12 x(x+2)$
x) The point $\qquad$ lies on the x -axis.
a) $(4,4)$
b) $(5,0)$
c) $(0,8)$
d) $(1,1)$

## SECTION-B

2. The cost of a pair of shoes is Rs 870 Find the sales price including tax, if $5 \%$ sales tax is charged?
3. Subtract: $7 x^{2} y^{3}-3 y^{2} z^{3}+9 x y z-4 y^{3}$ from $5 x^{2} y^{3}-3 z^{3} y^{2}+7 x y z+$ $11 y^{3}$.
4. Find the area of a field in the shape of a trapezium if one of its diagonals is 32 m and the lengths of the perpendiculars dropped on it from the remaining vertices are 7.5 m and 10.5 m .
5. Expand using exponents: a) 415.007 b) 1506.206
6. If 30 erasers of equal value cost Rs 210 , how many erasers of the same type can be bought for Rs 525?
7. Factorise using identity: $49 y^{2}+84 y z+36 z^{2}$.

## SECTION-C

8. By selling a mixer-grinder for Rs 42800 , a shop keeper makes a profit of $25 \%$. Find the cost price of the mixer-grinder.
9. Find the square using identity: a) $(4 x-7 z)^{2} \quad$ b) $99^{2}$
10.How much tin is required to make an open box with length 80 cm , breadth 25 cm and height 50 cm ?
10. Simplify: $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-5} \times 6^{-5}}$.
11. 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 assuming the number of school hours is the same?
13.Factorise: a) $x^{2}-12 x-45$ b) $144 a^{2}-169 b^{2}$

## SECTION-D

14.Mr. Lal borrowed a sum of Rs 18000 from a finance company at the rate $12 \%$ per annum compounded half yearly for 18 months. Find the amount and compound interest Mr. Lal has to pay.
15. A swimming pool is 25 m long, 14 m wide and 3 m deep. Find the cost of repairing its floor and four walls at the rate of Rs 25 per sq.m.
16. Evaluate: $\left[\left(\frac{1}{3}\right)^{-4}-\left(\frac{1}{7}\right)^{-2}\right] \div\left(\frac{1}{2}\right)^{-5}$.
17. Resolve into factors and divide: $4 y z\left(z^{2}+6 z-16\right) \div 2 y(z+8)$.
18. The maximum temperature on 7 days of June 2013 in Delhi is given below.

Draw a temperature time graph for the data (Linear graph).

| Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Max. <br> Temp. <br> in ${ }^{\circ} \mathrm{C}$ | 40.5 | 41 | 39 | 40 | 42 | 43 | 44 |

*******************************

