## INDIAN SCHOOL AL WADI AL KABIR

## DEPARTMENT OF MATHEMATICS (2014-2015)

## TOPIC: HOLIDAY PRACTICE QUESTIONS

NAME OF THE STUDENT:
CLASS: VIII SEC: $\qquad$
ROLL NO: ........
DATE: $\qquad$

1. Find the cube root of 13824 by prime factorisation method.
2. Find the smallest number by which 704 must be divided to obtain a perfect cube.
3. Basha makes a cuboid of plasticine of sides $8 \mathrm{~cm}, 5 \mathrm{~cm}, 7 \mathrm{~cm}$. How many such cuboids will he need to form a cube?
4. A shopkeeper bought two TV sets at ₹ 9000 each. He sold one at a profit $10 \%$ and the other at a loss of $5 \%$. Find whether he made as overall profit or loss.
5. Anil took a loan ₹ 50000 from a bank. If the rate of interest is $10 \%$ per annum, find the difference in amounts he would be paying after $1 \frac{1}{2}$ years if the interest is
i) Compounded annually
ii) Compounded half yearly.
6. A car was bought at ₹ 108000 . Its value depreciated at the rate of $9 \%$ per annum. Find the value after two year.
7. The area of a trapezium shaped field is $480 \mathrm{~m}^{2}$, the distance between two parallel sides is 15 m and one of the parallel side is 20 m . Find the other parallel side.
8. The diagonal of a quadrilateral shaped field is 24 m and the perpendiculars dropped on it from the remaining opposite vertices are 8 m and 13 m . Find the area of the field.
9. An aquarium is in the form of a cuboid whose external measures are $80 \mathrm{~cm} \times 30 \mathrm{~cm} \times 40 \mathrm{~cm}$. Find the area of the colour paper needed to cover all the four sides of the aquarium.
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 rectangular sheet.
11. A company packages its milk powder in cylindrical container whose base has a diameter of 14 cm and height 20 cm . Company places a label around the surface of the container. If the label is placed 2 cm from top and bottom, what is the area of the label.
12. A milk tank is in the form of cylinder whose diameter is 3 m and length is 7 m . Find the quantity of milk in litres that can be stored in the tank?
13. Find the height of a cuboid whose base area is $180 \mathrm{~cm}^{2}$ and volume is $1800 \mathrm{~cm}^{3}$ ?
14. Water is pouring into a cuboidal reservoir at the rate of 60 litres per minute. If the volume of reservoir is $108 \mathrm{~m}^{3}$, find the number of hours it will take to fill the reservoir.
15. A 5 m 60 cm high vertical pole post casts a shadow 3 m 20 cm long. Find at the same time
i) The length of the shadow cast by another pole 10 m 50 cm high
ii) The height of a pole which casts a shadow 5 m long
16. A car takes 2 hours to reach a destination by travelling at the speed of $60 \mathrm{~km} / \mathrm{h}$. How long will it take when the car travels at the speed of $80 \mathrm{~km} / \mathrm{h}$ ?
17. If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the number of the children is reduced by 4 ?
18. A farmer has enough food to feed10 animals in his cattle for 6 days. How long the food last if would there were 10 more animals in his cattle?
19. Identify the terms, their coefficients for each of the following expressions:
a) $5 a^{2} b-3 c b^{2}$; b) $4 x y z+8 x^{4} y \quad$; c) $3 p q r^{3}+\frac{2}{3} p q$
20. Subtract $7 z y+3 x z-11 x y$ from $2 y z-14 x z+11 x y z$
21. Find the area of rectangle whose length and breadth are given respectively: $(5-2 x)$ and $(3+4 x)$.
22. Find the volume of the cuboid whose dimensions are $a b,(a-b), 4 a^{2} b$ respectively.
23. Simplify:
a) $\left(a^{2}+b c\right)(b-c)+2(a b+a c)$
b) $\left(\frac{2}{5} a-5 a b c\right) \times 4\left(\frac{3}{5} b c^{2}+a b\right)$
24. Find the product of
a) $a X(a+b-c)$
b) $p \times p^{2} \times p^{3} \times p^{4}$
25. Radha borrowed ₹ 12000 from Jayaraj at $5 \%$ per annum simple interest for 2 years. Ramani borrowed same amount at 4\% per annum compound interest. Find who has to pay back more money and by how much?
