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# INDIAN SCHOOL MUSCAT THIRD PERIODIC TEST 

## MATHEMATICS

CLASS: IX
10.01.2019

Sub. Code: 041

Time Allotted: 50 mts
Max. Marks: 20

GENERAL INSTRUCTIONS:

1. All questions are compulsory.
2. Questions 1 to 4 carry TWO marks each.
3. Questions 5 to 7 carry FOUR marks each.
4. ABCD is a parallelogram. BE is perpendicular to AD . If $\mathrm{BE}=14 \mathrm{~cm}, \mathrm{AD}=$ 8 cm , then find the area of $\triangle \mathrm{DBC}$.
5. Diagonals $A C$ and $B D$ of a trapezium $A B C D$ with $A B \| C D$ intersect each other at $O$. Prove that $\operatorname{ar}(\triangle \mathrm{AOD})=\operatorname{ar}(\triangle \mathrm{BOC})$.
6. The total surface area of a cube is $726 \mathrm{~cm}^{2}$. Find the length of edge of the cube.
7. The height of a cone is 16 cm and its base radius is 12 cm . Find the total surface area of a cone. (Take $\Pi=3.14$ )
8. In $\triangle \mathrm{ABC}, \mathrm{E}$ is the midpoint of the median AD . Show that $\operatorname{ar}(\triangle B E D)=\frac{1}{4} \operatorname{ar}(\triangle A B C)$.
9. A hemispherical bowl without lid, made of brass, has inner diameter 70 cm . Find the cost of tin plating it on the inside at the rate of $₹ 16$ per $100 \mathrm{~cm}^{2}$.
10. The capacity of a cuboidal tank is 50000 litres of water. Find the breadth of the tank, if its length and depth are respectively 2.5 m and 10 m .
