A Jesuit Christian minority Institution

Subject: Mathematics   **Class: X**   **Date:28.04.2020**

Worksheet-19

Chapter- Right circular cone
Topic- Volume of right circular cone

1. <u>**Choose the correct alternative.**</u>   **15x1=15**
   a)Find the volume of a right circular cone with radius 7 m and height 9 m .
   i) 147 Π cubic cm   ii) 147Π cubic meter   iii) 174 Π   cubic m iv)none of these

   b) Calculate volume of a right circular cone with radius 5 cm and height 12 cm
   i) 100 Π cubic cm.   ii) 100 Π cubic m   iii) 100 cubic cm   iv) none of these

   c)calculate volume of a right circular cone with 10 cm lateral height and 6 cm radius.
   i) 96 Π sq m   ii) 96 Π cubic m   iii) 96Π   cubic cm   iv) none of these

   d) Find ratio of volumes of two right circular cones when ratio of their height is 1:3 and ratio of their base radius is 3:1.
   i) 3:1 ii) 1:2   iii) 2:1   iv) none of these

   e) If radius and height of a right circular cone get doubled. Then which one of the following is true? If old volume is A and new volume is B
   i) B=8A   ii) A =8B   iii) B=4A   iV) none of these

   f)Keeping radius constant of a right circular cone if height is made double. Then volume increases by i) 200% ii) 300 %   iii) 100%   iv) none of these

   g) Ratio of the volume of two right circular cone is 1:4   and ratio of radius is 4:5 , then ratio of height is i) 25:64   ii) 64 :25 iii) 5:4   iv) none of these

   h)Volume of a right circular cone is 100Π cubic cm and height is 12 cm . Radius is i) 7 cm ii) 10 cm   iii) 5 cm   iv) none of these

   i)A right circular cone has volume as V cubic unit and base area is A sq unit . Height is i) 3V/A   ii) 3A/V iii) 3AV   iv) none of these

   j) If Numerical values of volume and curved surface area of a right circular cone are equal . h unit and r unit are height and radius of the cone respectively. Then find value of $1/h^2 + 1/r^2$ i)   1/3 ii) 1/9   iii) 1/7   iv) none of these

k) ratio of radius of a right circular cylinder and a right circular cone is 3:4 and ratio their height is 2:3 , then ratio of their volumes is   i) 8:9   ii) 1:9   iii) 9:8

l)Find volume of a right circular cone with height 4 dcm and lateral height 5 dcm.
i) 37.71 cubic dcm   ii) 35.5 cubic dcm   iii) 71.37   cubic dcm   iv) none of these

 m) Find height of a right circular cone with diameter 28 cm and volume 9856 cubic cm.
i) 48 cm   ii) 16 cm   iii) 24 cm   iv) none of these

n) How much water will be contained in a right circular conic container with radius 3 dcm and height 9 dcm ?
 i) 85.8 litre   ii) 84.8 litre   iii) 48.8 cubic dcm   iv) none of these

o)Find volume of a right circular cone with 9 cm radius and 10 cm lateral height.
i) 81 Π cubic cm   ii) 80Π cubic cm   iii) 78Π cubic cm iv) none of these

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