ONE MARK TEST

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ENGLISH MEDIUM **LESSON – 7** **TEST - 1**

1 In a hollow cylinder, the sum of the external and internal radii is 14 cm and the width is 4 cm. If its height is 20 cm, the volume of the material in it is

(A) 5600π cm^3 (B) 1120π cm^3 (C) 56π cm^3 (D) 3600π cm^3

2 If the radius of the base of a cone is tripled and the height is doubled then the volume is

(A) made 6 times (B) made 18 times (C) made 12 times (D) unchanged

3 The curved surface area of a right circular cone of height 15 cm and base diameter 16 cm is

(A) 60π cm^2 (B) 68π cm^2 (C) 120π cm^2 (D) 136π cm^2

4 The height of a right circular cone whose radius is 5 cm and slant height is 13 cm will be

(A) 12 cm (B) 10 cm (C) 13 cm (D) 5 cm

5 A spherical ball of radius r_1 units is melted to make 8 new identical balls each of radius r_2 units. Then $r_1 : r_2$ is

(A) 2:1 (B) 1:2 (C) 4:1 (D) 1:4

6 The total surface area of a hemi-sphere is how much times the square of its radius.

(A) π (B) 4π (C) 3π (D) 2π

7 A frustum of a right circular cone is of height 16cm with radii of its ends as 8cm and 20cm. Then, the volume of the frustum is

(A) 3328π cm^3 (B) 3228π cm^3 (C) 3240π cm^3 (D) 3340π cm^3

8 The total surface area of a cylinder whose radius is $\frac{1}{3}$ of its height is

(A) $\frac{9\pi h^2}{8}$ sq.units (B) $24\pi h^2$ sq.units (C) $\frac{8\pi h^2}{9}$ sq.units (D) $\frac{56\pi h^2}{9}$ sq.units

9 The volume (in cm^3) of the greatest sphere that can be cut off from a cylindrical log of wood of base radius 1 cm and height 5 cm is

(A) $\frac{4}{3}\pi$ (B) $\frac{10}{3}\pi$ (C) 5π (D) $\frac{20}{3}\pi$

10 The ratio of the volumes of a cylinder, a cone and a sphere, if each has the same diameter and same height is

(A) 1:2:3 (B) 2:1:3 (C) 1:3:2 (D) 3:1:2