1. Choose the correct alternative.   1x15=15

    a) If the height of a cylinder is doubled by what number must the radius of the base be multiplied so that the resulting cylinder ha the same volume as the original cylinder?

    i)   **$1/\sqrt{2}$**   ii) ½   iii) 2   iv) ¼

    b) A cylinder with radius r and height h is closed on the top and bottom which of the following expressions represents the total surface area?

    i) $2\Pi r^2 + h$ **ii) $2\Pi r$ (r+h)**   iii) $2\Pi r$ + h   iv) none of these

    c) If height of sand in a cylindrical shaped can drops 3 inches when 1 cubic foot of sand is poured out. Find diameter of the can.

    i) $24/\sqrt{\Pi}$ ii) $12/\Pi$**iii) $48/\sqrt{\Pi}$**   iv) none of these

    d)If the diameter of a closed right circular cylinder is equal to its

       height h. Then the whole surface area is

    i)   **$3\Pi h^2/2$**   ii) $2\Pi h^2$ iii) $2\Pi r(r+h)$ iv) none of these

    e) A right circular cylindrical shaped tunnel of diameter 2 m and length 40 m is to be constructed from a sheet iron. The area of the iron sheet required in. sq m is

    i) 40Π sq m   **ii) 80Π sq m**   iii) 160Π sq m   iv) 200Π

    f) 2 right circular cylinder cylinders of equal volume have their height in the ratio 1:2. Ratio of their radii is

    i)   **$\sqrt{2}$:1**   ii)2:1   iii) 1:$\sqrt{2}$ iv) 1:2

g) The radius of a wire is decreased to one-third. If volume remains the same , the length will become

i)3 times   ii) 5 times   iii) 6 times   **iv) 9 times**

h)Curved surface area of a right circular cylinder is 4.4 sq m if the

radius of the base of the cylinder is 0.7 m, find its height

i)0.5m   ii) 0.1 m   **iii) 1 m**   iv) 0.8 m

i) A cylindrical pillar is 50 cm in diameter and 3.5 m in height. Find

the cost of painting the curved surface of the pillar at the rate of Rs

12.50 per sq m.

i) Rs 68.75   ii) Rs 68.50   iii) Rs 68   iv) none of these

j)The total surface area of a hollow metal cylinder open at both

ends of external radius 8 cm and height 10 cm is 338Π sq cm.

Taking r to be the inner radius, obtain thickness of the metal

Cylinder

i)6 cm   ii) 5 cm   **iii) 3cm**   iv) none of these

k)The radius and height of a right circular cylinder   are given as

5 m and 6.5 m respectively Find the volume.

i)500 cu m   **ii) 510.25 cu m**   iii) 501.25 cu m   iv) none of these

l) The radius and height of a right circular cylinder   are given as   5 m and 6.5 m respectively Find the total surface area.

i) 360 sq m   ii) 361 sq m   **iii) 361.1 sq m**   iv) none of these

m)If lateral surface of a right circular cylinder having diameter 26 cm and height 21 cm is to be covered by paper. Then what is the area of paper required?

i)1761 sq cm   ii) 1700 sq cm   **iii) 1716 sq cm**   iv) none of these

n)If heights of 2 right circular cylinder are in the ratio 1:2 and perimeter of the base are in the ratio of 3:4 . Find ratio of their volumes.

i)32:9 **ii) 9:32**   iii) 9:20   iv) none of these

o)If length of radius of a right circular cylinder is decreased by 50% and height is increased by 50%. Calculate by how much % of the volume   will be changed.

i) 62%   ii) 63.5%   iii) 65%   **iv) 62.5%**

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