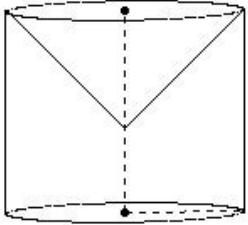


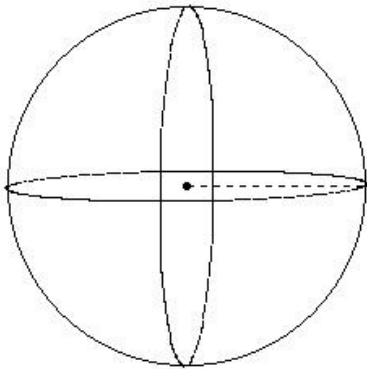


1. From a solid cylinder of height 12.00 cm and base radius 7.00 cm, a conical cavity of height 7.00 cm and base radius 7.00 cm is drilled out. Find the total surface area of the resulting solid



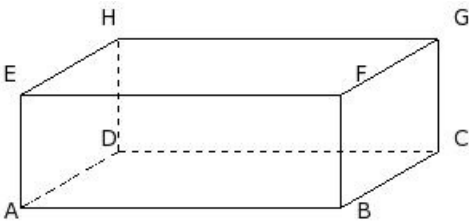
- (i) 885.80 sq.cm (ii) 899.80 sq.cm (iii) 912.80 sq.cm (iv) 924.80 sq.cm

2. If the volume of a sphere is 5577.52 cu.cm, its L.S.A is



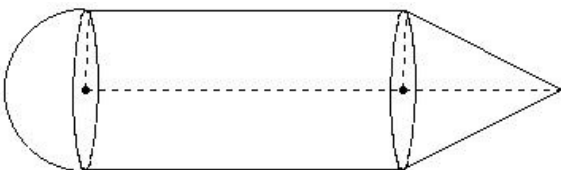
- (i) 1251.14 sq.cm (ii) 1481.14 sq.cm (iii) 1681.14 sq.cm (iv) 1541.14 sq.cm (v) 1521.14 sq.cm

3. If the length, breadth and T.S.A of a cuboid are 20.00 cm, 14.00 cm and 1036.00 sq.cm respectively, its height is



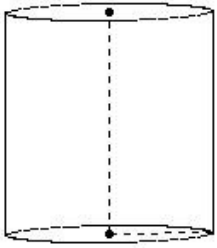
- (i) 5.00 cm (ii) 6.00 cm (iii) 7.00 cm (iv) 8.00 cm (v) 9.00 cm

4. A solid consists of a right circular cylinder with a hemisphere on one end and a cone on the other. The radius and height of the cylindrical part are 5.00 cm and 20.00 cm respectively. The radii of the hemispherical and conical parts are the same as that of the cylindrical part. Calculate the total surface area of the solid, if the height of the conical part is 10.00 cm



- (i) 961.40 sq.cm (ii) 953.40 sq.cm (iii) 949.40 sq.cm (iv) 978.40 sq.cm

5. If the radius of a cylinder is 6.00 cm and height is 13.00 cm, its T.S.A is

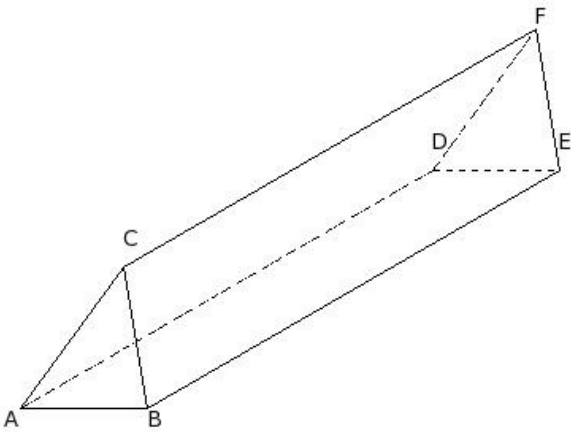


- (i) 698.57 sq.cm (ii) 729.57 sq.cm (iii) 732.57 sq.cm (iv) 716.57 sq.cm (v) 714.57 sq.cm

6. A conical vessel of radius 3.00 cm and height 4.00 cm is completely filled with water. A sphere is lowered into the water and its size is such that when it touches the sides, it is just immersed. Find the fraction of the water that overflows

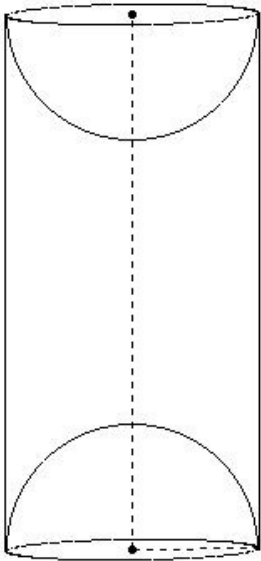
- (i) $\frac{5}{8}$ (ii) $\frac{3}{10}$ (iii) $\frac{1}{8}$ (iv) $\frac{3}{8}$ (v) $\frac{1}{2}$

7. If the three sides of a triangular prism are 8.00 cm, 9.00 cm, 11.00 cm and height is 60.00 cm, its T.S.A is



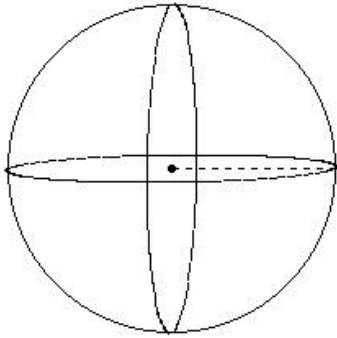
- (i) 1891.00 sq.cm (ii) 1751.00 sq.cm (iii) 1481.00 sq.cm (iv) 1671.00 sq.cm (v) 1801.00 sq.cm

8. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 32.00 cm and its radius is 7.50 cm. Find the total surface area of the solid



- (i) 2035.71 sq.cm (ii) 2275.71 sq.cm (iii) 2215.71 sq.cm (iv) 2345.71 sq.cm (v) 1985.71 sq.cm

9. If the L.S.A of a sphere is 1257.14 sq.cm, its volume is



- (i) 4440.48 cu.cm (ii) 4020.48 cu.cm (iii) 4360.48 cu.cm (iv) 4010.48 cu.cm (v) 4190.48 cu.cm

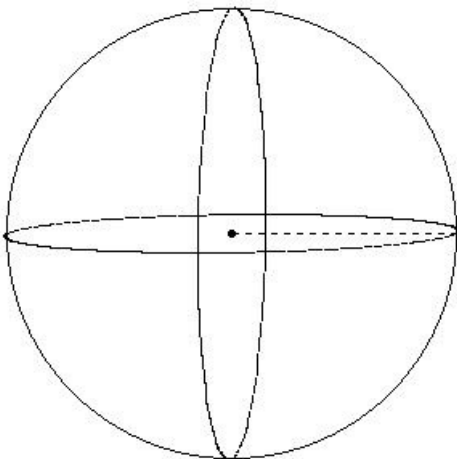
10. A cylindrical vessel of base radius 13.00 cm contains water . A solid sphere of radius 7.00 cm is immersed completely in the water. Find the rise in the water level in the vessel

- (i) 2.71 cm (ii) 1.71 cm (iii) 3.71 cm (iv) 0.71 cm (v) 4.71 cm

11. The height of a right circular cone is 23.00 cm and the radius of its base is 5.50 cm. It is melted and recast into a right circular cone with base radius 4.40 cm. Find the new height

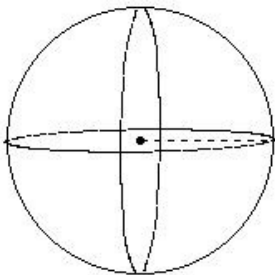
- (i) 38.94 cm (ii) 35.94 cm (iii) 30.94 cm (iv) 32.94 cm (v) 40.94 cm

12. If the L.S.A of a sphere is 2464.00 sq.cm, its T.S.A is



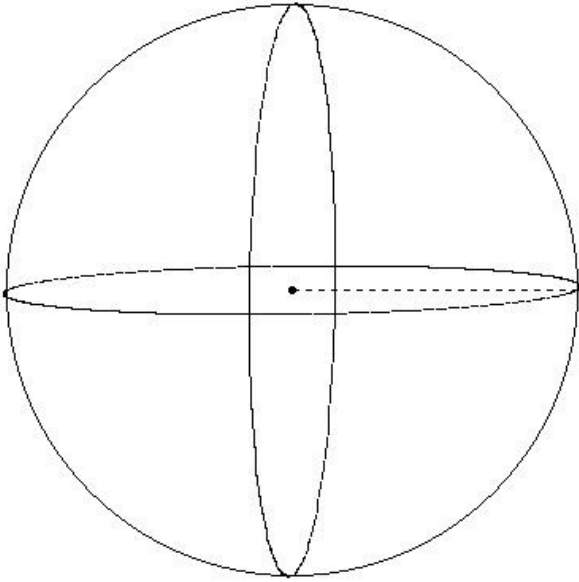
- (i) 2464.00 sq.cm (ii) 2604.00 sq.cm (iii) 2234.00 sq.cm (iv) 2544.00 sq.cm (v) 2404.00 sq.cm

13. If the L.S.A of a sphere is 804.57 sq.cm, its radius is



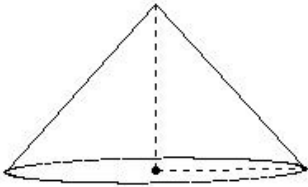
- (i) 6.00 cm (ii) 10.00 cm (iii) 7.00 cm (iv) 8.00 cm (v) 9.00 cm

14. If the volume of a sphere is 24438.86 cu.cm, its radius is



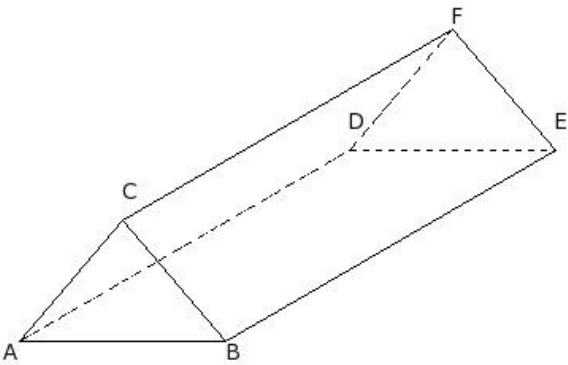
- (i) 21.00 cm (ii) 13.00 cm (iii) 23.00 cm (iv) 15.00 cm (v) 18.00 cm

15. If the base radius of a cone is 9.00 cm and slant height is 13.45 cm, its L.S.A. is



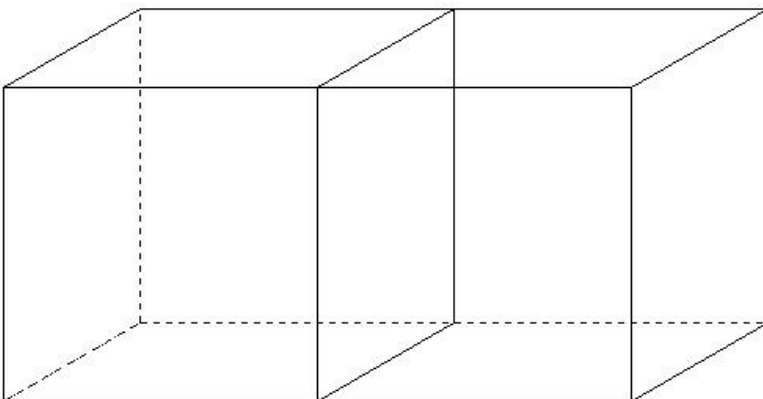
- (i) 397.44 sq.cm (ii) 380.44 sq.cm (iii) 362.44 sq.cm

16. If the three sides of a triangular prism are 13.00 cm, 10.00 cm, 10.00 cm and L.S.A is 1584.00 sq.cm, its base area is



- (i) 54.40 sq.cm (ii) 52.40 sq.cm (iii) 49.40 sq.cm (iv) 44.40 sq.cm (v) 46.40 sq.cm

17. Two cubes each of volume 8000.00 cu.cm are joined end to end . Find the surface area of the resulting cuboid.

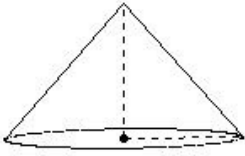


- (i) 4000.00 sq.cm (ii) 3960.00 sq.cm (iii) 3840.00 sq.cm (iv) 4120.00 sq.cm (v) 4130.00 sq.cm

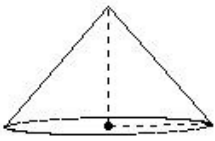
18. A cone of maximum volume is carved out of a cuboid of dimensions $18.00\text{ cm} \times 18.00\text{ cm} \times 14.00\text{ cm}$. Find the volume of the cone
(i) 1188.00 cu.cm (ii) 1048.00 cu.cm (iii) 1018.00 cu.cm (iv) 1228.00 cu.cm (v) 1438.00 cu.cm

19. A copper sphere having a radius of 9.00 cm is melted and drawn into a cylindrical wire of radius 0.30 cm . Calculate the length of the wire.
(i) 136.00 m (ii) 108.00 m (iii) 120.00 m (iv) 82.00 m (v) 93.00 m

20. If the base radius of a cone is 7.00 cm and vertical height is 8.00 cm , its slant height is



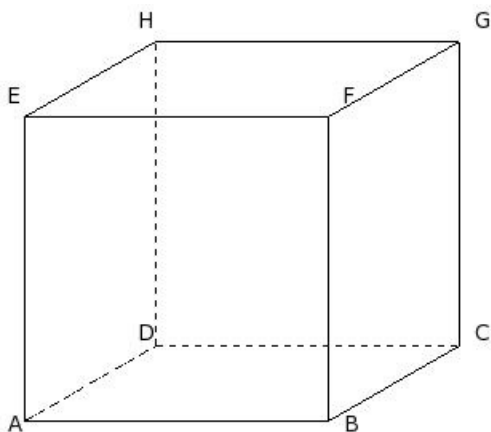
- (i) 15.63 cm (ii) 13.63 cm (iii) 10.63 cm (iv) 7.63 cm (v) 5.63 cm
21. If the base radius of a cone is 6.00 cm and slant height is 9.22 cm , its base area is



- (i) 131.14 sq.cm (ii) 140.14 sq.cm (iii) 97.14 sq.cm (iv) 100.14 sq.cm (v) 113.14 sq.cm
22. A cylinder with radius 3.00 cm and height 8.00 cm is melted to recast into a cone of height 24.00 cm . Find the radius of the cone.
(i) 1.00 cm (ii) 2.00 cm (iii) 5.00 cm (iv) 4.00 cm (v) 3.00 cm

- A conical vessel, whose internal radius is 12.00 cm and height 29.00 cm , is full of liquid. Its contents are emptied
23. into a cylindrical vessel with internal radius 8.00 cm . Find the height to which the liquid rises in the cylindrical vessel.
(i) 26.75 cm (ii) 21.75 cm (iii) 16.75 cm (iv) 24.75 cm (v) 18.75 cm

24. If the L.S.A of a cube is 1444.00 sq.cm , its side is



- (i) 19.00 cm (ii) 24.00 cm (iii) 16.00 cm (iv) 14.00 cm (v) 22.00 cm
25. A well of diameter 13.00 m is dug to a depth of 15.00 m and the soil from digging is evenly spread out to form a platform of base dimensions $23.00\text{ m} \times 28.00\text{ m}$. Find the height of the platform
(i) 2.09 m (ii) 1.09 m (iii) 4.09 m (iv) 5.09 m (v) 3.09 m

Assignment Key

1) (ii)	2) (v)	3) (iii)	4) (i)	5) (iv)	6) (iv)
7) (ii)	8) (iii)	9) (v)	10) (i)	11) (ii)	12) (i)
13) (iv)	14) (v)	15) (ii)	16) (iii)	17) (i)	18) (i)
19) (ii)	20) (iii)	21) (v)	22) (v)	23) (ii)	24) (i)
25) (v)					