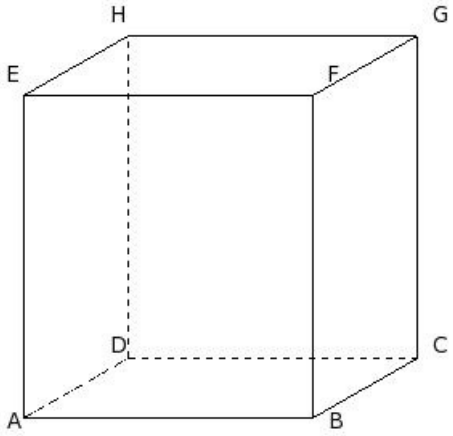
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Mensuration

Grade : SSC Grade X

1. If the length, breadth and T.S.A of a cuboid are 18.00 cm, 15.00 cm and 1860.00 sq.cm respectively, its height is



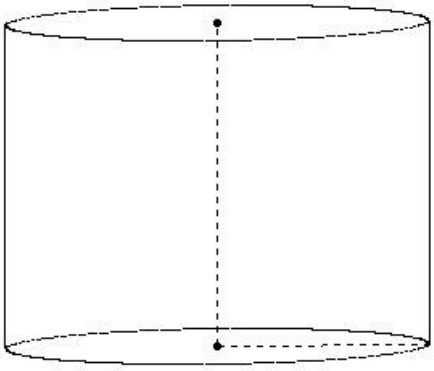
(i) 20.00 cm (ii) 15.00 cm (iii) 17.00 cm (iv) 25.00 cm (v) 23.00 cm

2. Water in a canal, 5 m wide and 5 m deep is flowing with a speed of 6 kmph . How much area will it irrigate in 55 min, if 4 cm of standing water is needed ?

(i) 3187500.00 sq.m (ii) 3467500.00 sq.m (iii) 3377500.00 sq.m (iv) 3657500.00 sq.m

(v) 3437500.00 sq.m

3. If the radius of a cylinder is 13.00 cm and height is 20.00 cm, its T.S.A is

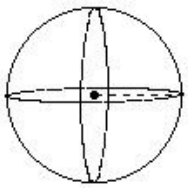


(i) 2766.57 sq.cm (ii) 2526.57 sq.cm (iii) 2916.57 sq.cm (iv) 2416.57 sq.cm (v) 2696.57 sq.cm

4. Metallic spheres of radii 4.00 cm, 11.00 cm are melted to form a single solid sphere. Find the radius of the resulting sphere.

(i) $\sqrt[3]{1398}$ cm (ii) 1395 cm (iii) $\sqrt[5]{1395}$ cm (iv) $\sqrt[3]{1393}$ cm (v) $\sqrt[3]{1395}$ cm

5. If the T.S.A of a sphere is 314.29 sq.cm, its radius is

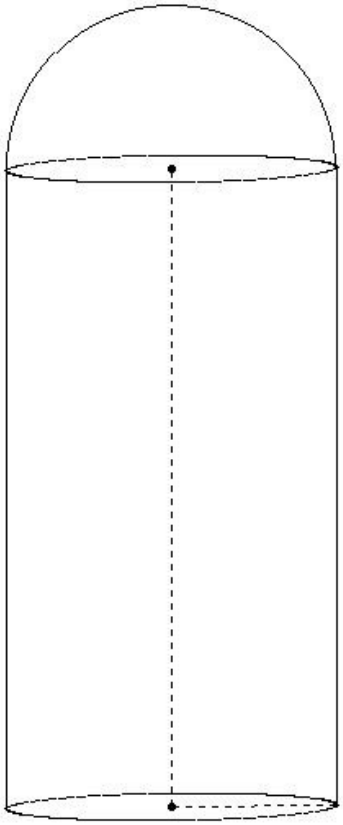


(i) 4.00 cm (ii) 5.00 cm (iii) 7.00 cm (iv) 6.00 cm (v) 3.00 cm

6. A cone of maximum volume is carved out of a cube of edge 24.00 cm. Find the volume of the cone

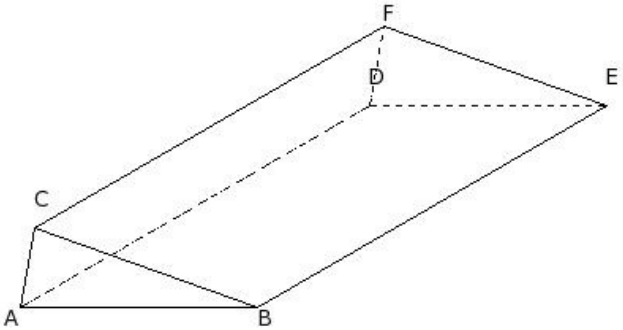
(i) 3440.57 cu.cm (ii) 3620.57 cu.cm (iii) 3790.57 cu.cm (iv) 3650.57 cu.cm (v) 3470.57 cu.cm

7. A solid consists of a cylinder with one hemispherical end with length 39.00 cm and diameter 20.00 cm. Find the total surface area of the solid



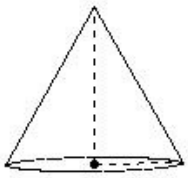
(i) 3624.29 sq.cm (ii) 3394.29 sq.cm (iii) 3534.29 sq.cm (iv) 3224.29 sq.cm (v) 3254.29 sq.cm

8. If the three sides of a triangular prism are 15.00 cm, 15.00 cm, 5.00 cm and L.S.A is 1785.00 sq.cm, its base area is



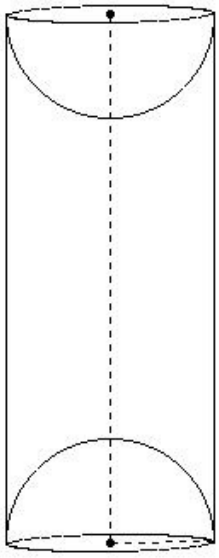
(i) 39.98 sq.cm (ii) 33.98 sq.cm (iii) 31.98 sq.cm (iv) 36.98 sq.cm (v) 41.98 sq.cm

9. If the base radius of a cone is 5.00 cm and vertical height is 9.00 cm, its volume is



(i) 259.71 cu.cm (ii) 209.71 cu.cm (iii) 218.71 cu.cm (iv) 253.71 cu.cm (v) 235.71 cu.cm

10. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 31.00 cm and its radius is 6.00 cm. Find the total surface area of the solid

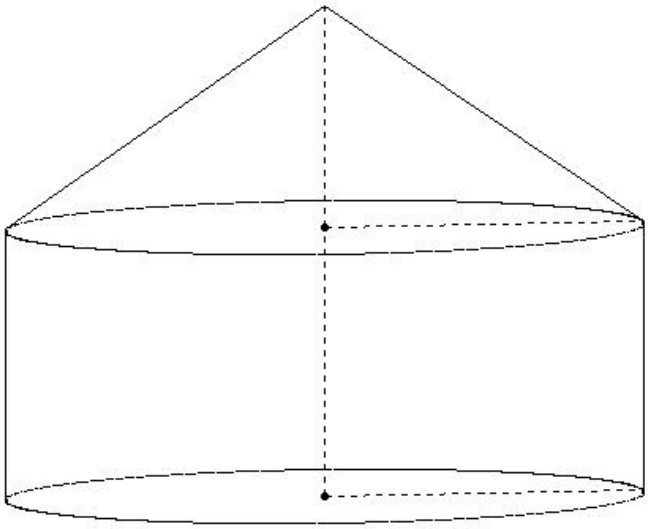


(i) 1341.71 sq.cm (ii) 1471.71 sq.cm (iii) 1751.71 sq.cm (iv) 1621.71 sq.cm (v) 1801.71 sq.cm

11. A solid metallic cylinder of base radius 15.00 cm and height 12.00 cm is melted to form cones each of height 1.00 cm and radius 1.00 cm . Find the number of complete cones formed

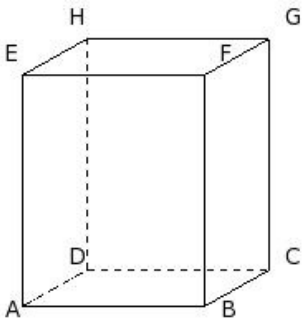
(i) 7980 (ii) 8240 (iii) 7930 (iv) 8100 (v) 8320

12. A tent is in the form of a cylinder surmounted by a cone., The height of the tent above the ground is 31 m and the height of the cylindrical part is 17.00 m. If the diameter of the base is 40.00 m, find the quantity of canvas required to make the tent. Allow 5% extra for folds and for stitching.



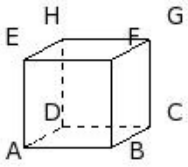
(i) 3995.06 sq.m (ii) 3715.06 sq.m (iii) 4075.06 sq.m (iv) 3855.06 sq.m (v) 3805.06 sq.m

13. If the length, breadth and height of a cuboid are 11.00 cm, 9.00 cm and 14.00 cm respectively, its volume is



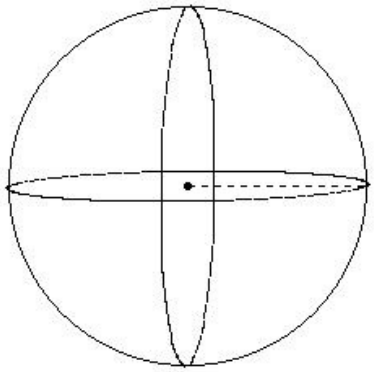
(i) 1226.00 cu.cm (ii) 1516.00 cu.cm (iii) 1606.00 cu.cm (iv) 1386.00 cu.cm (v) 1266.00 cu.cm

14. If the side of a cube is 5.00 cm, its T.S.A is



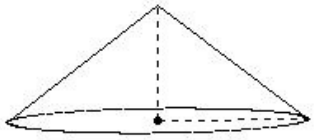
(i) 145.00 sq.cm (ii) 150.00 sq.cm (iii) 154.00 sq.cm (iv) 174.00 sq.cm (v) 122.00 sq.cm

15. If the L.S.A of a sphere is 1521.14 sq.cm, its T.S.A is



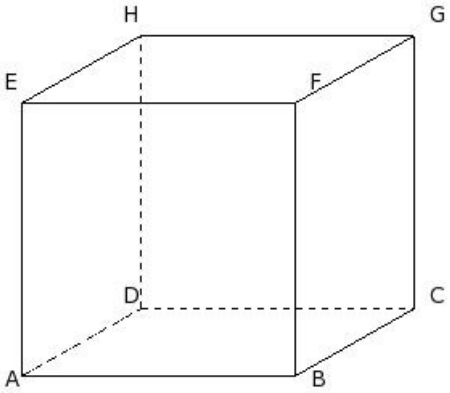
(i) 1281.14 sq.cm (ii) 1491.14 sq.cm (iii) 1671.14 sq.cm (iv) 1661.14 sq.cm (v) 1521.14 sq.cm

16. If the base radius of a cone is 9.00 cm and vertical height is 7.00 cm, its T.S.A is



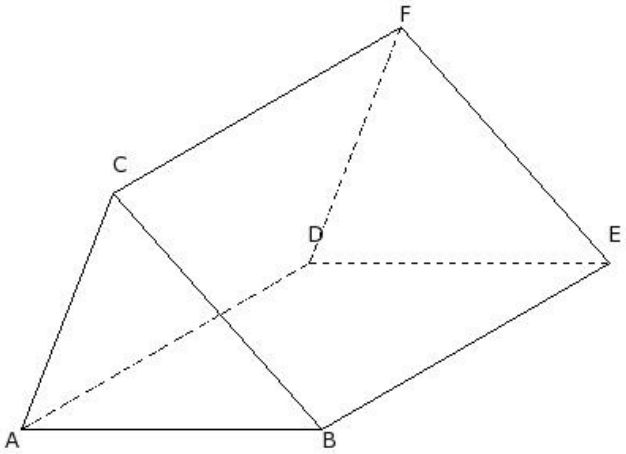
(i) 599.03 sq.cm (ii) 581.03 sq.cm (iii) 577.03 sq.cm (iv) 565.03 sq.cm (v) 574.03 sq.cm

17. If the volume of a cube is 4913.00 cu.cm, its side is



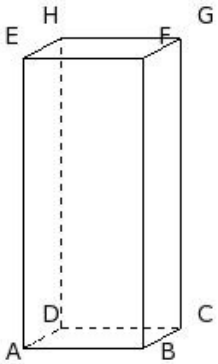
(i) 17.00 cm (ii) 22.00 cm (iii) 14.00 cm (iv) 20.00 cm (v) 12.00 cm

18. If the L.S.A of a triangular prism is 2310.00 sq.cm, base area is 141.99 sq.cm and base perimeter is 55.00 cm, its volume is



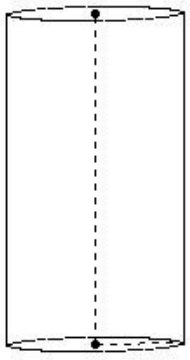
(i) 6123.58 cu.cm (ii) 5963.58 cu.cm (iii) 5723.58 cu.cm (iv) 6233.58 cu.cm (v) 5893.58 cu.cm

19. If the length, height and T.S.A of a cuboid are 7.00 cm, 17.00 cm and 478.00 sq.cm respectively, its breadth is



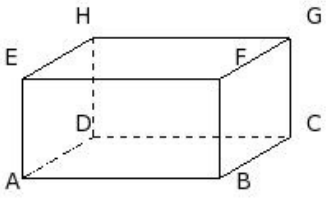
(i) 5.00 cm (ii) 3.00 cm (iii) 7.00 cm (iv) 6.00 cm (v) 4.00 cm

20. If the radius of a cylinder is 5.00 cm and height is 19.00 cm, its volume is



(i) 1662.86 cu.cm (ii) 1492.86 cu.cm (iii) 1352.86 cu.cm (iv) 1572.86 cu.cm (v) 1322.86 cu.cm

21. If the length, height and T.S.A of a cuboid are 12.00 cm, 6.00 cm and 504.00 sq.cm respectively, its volume is

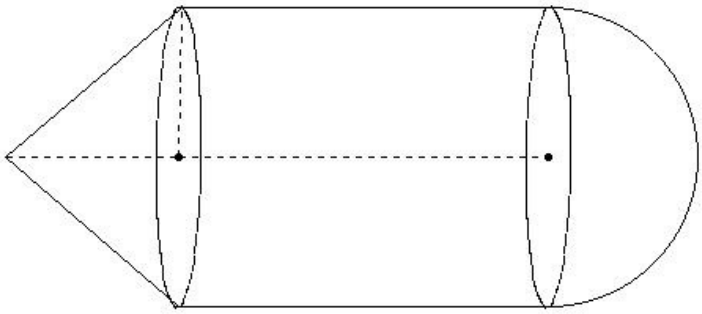


(i) 742.00 cu.cm (ii) 692.00 cu.cm (iii) 720.00 cu.cm (iv) 723.00 cu.cm (v) 706.00 cu.cm

22. An open cylindrical vessel of internal diameter 28.00 cm and height 20.00 cm stands on a horizontal table. Inside this is placed a solid metallic right circular cone, the diameter of whose base is 14.00 cm and height 20.00 cm and filled with water. If the cone is replaced by another cone whose height is 10.00 cm and base radius is 4.20 cm, find the drop in the water level.

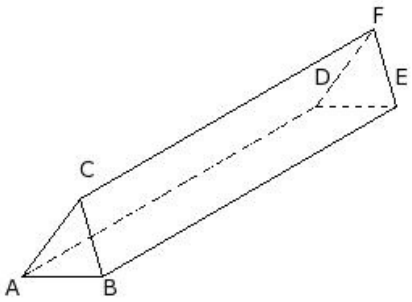
(i) 1.37 cm (ii) 3.37 cm (iii) 2.37 cm (iv) 0.37 cm (v) 9.37 cm

23. 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 9.50 cm and 23.50 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 11.00 cm



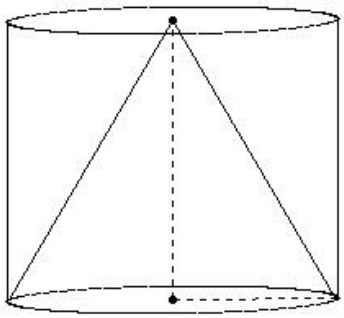
(i) 2674.40 sq.cm (ii) 2184.40 sq.cm (iii) 2464.40 sq.cm (iv) 2404.40 sq.cm (v) 2354.40 sq.cm

24. If the L.S.A of a triangular prism is 672.00 sq.cm, T.S.A is 696.00 sq.cm and height is 42.00 cm, its base perimeter is



(i) 13.00 cm (ii) 11.00 cm (iii) 16.00 cm (iv) 19.00 cm (v) 21.00 cm

25. From a circular cylinder of diameter 20.00 cm and height 17.00 cm, a conical cavity of the same base radius and of the same height is hollowed out. Find the total surface area of the remaining solid.



(i) 2152.63 sq.cm (ii) 1832.63 sq.cm (iii) 2132.63 sq.cm (iv) 1822.63 sq.cm (v) 2002.63 sq.cm

Assignment Key

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