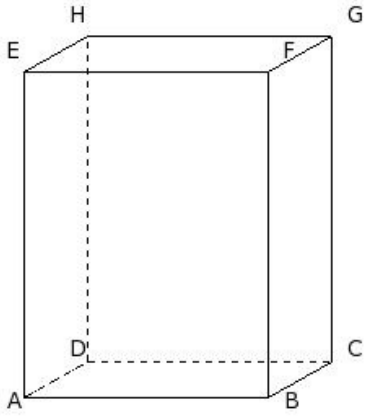
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Mensuration

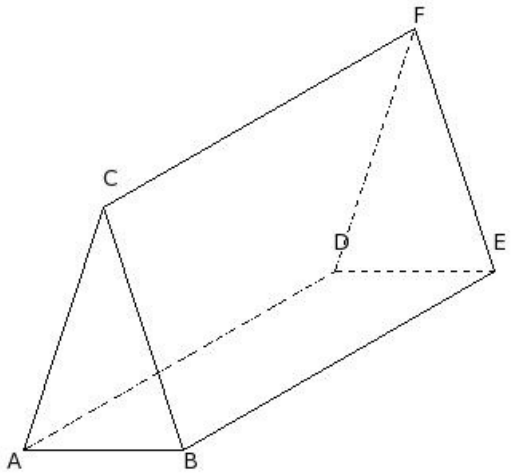
Grade : SSC Grade X

1. If the length, breadth and height of a cuboid are 15.00 cm, 9.00 cm and 20.00 cm respectively, its T.S.A is



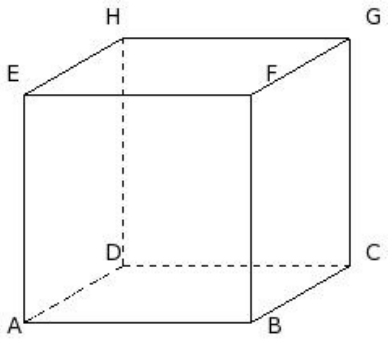
(i) 1230.00 sq.cm (ii) 980.00 sq.cm (iii) 1460.00 sq.cm (iv) 1070.00 sq.cm (v) 1310.00 sq.cm

2. If the three sides of a triangular prism are 10.00 cm, 16.00 cm, 16.00 cm and L.S.A is 1890.00 sq.cm, its T.S.A is



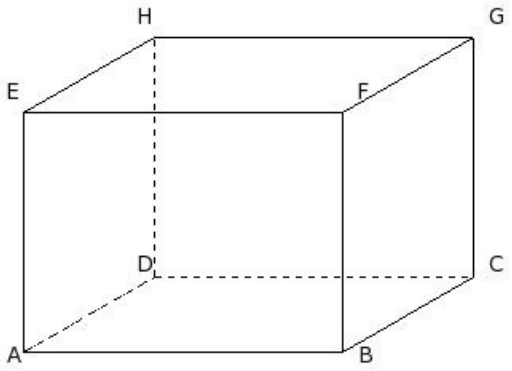
(i) 1871.98 sq.cm (ii) 2041.98 sq.cm (iii) 2211.98 sq.cm (iv) 2321.98 sq.cm (v) 2001.98 sq.cm

3. If the side of a cube is 14.00 cm, its T.S.A is



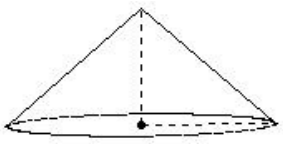
(i) 1176.00 sq.cm (ii) 1336.00 sq.cm (iii) 1226.00 sq.cm (iv) 1016.00 sq.cm (v) 956.00 sq.cm

4. If the length, breadth and height of a cuboid are 20.00 cm, 19.00 cm and 15.00 cm respectively, its volume is



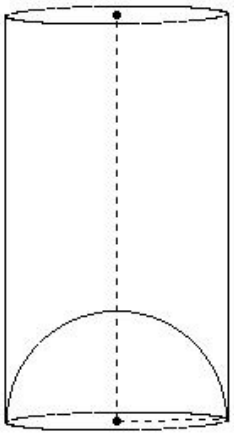
(i) 5530.00 cu.cm (ii) 5420.00 cu.cm (iii) 5700.00 cu.cm (iv) 5760.00 cu.cm (v) 5960.00 cu.cm

5. If the base radius of a cone is 8.00 cm and slant height is 10.63 cm, its volume is



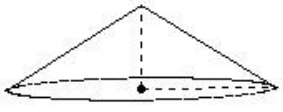
(i) 444.33 cu.cm (ii) 451.33 cu.cm (iii) 477.33 cu.cm (iv) 469.33 cu.cm (v) 492.33 cu.cm

6. A hemispherical depression is cut out from one face of a cylinder. The height of the cylinder is 24.00 cm and its radius is 6.50 cm. Find the total surface area of the solid



(i) 1108.93 sq.cm (ii) 1638.93 sq.cm (iii) 1378.93 sq.cm (iv) 1318.93 sq.cm (v) 1558.93 sq.cm

7. If the slant height of a cone is 9.43 cm and vertical height is 5.00 cm, its base area is

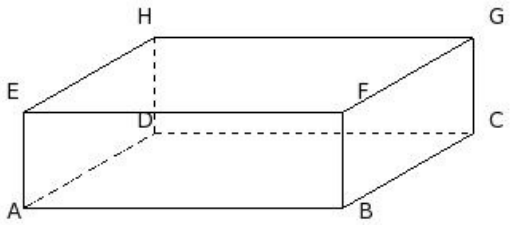


(i) 205.14 sq.cm (ii) 201.14 sq.cm (iii) 199.14 sq.cm (iv) 178.14 sq.cm (v) 219.14 sq.cm

8. A hollow sphere of internal and external diameters 40.00 cm and 42.00 cm respectively is melted into a cone of base diameter 20.00 cm. Find the height of the cone

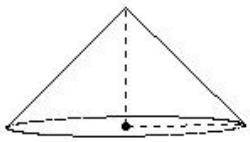
(i) 45.44 cm (ii) 47.44 cm (iii) 50.44 cm (iv) 53.44 cm (v) 55.44 cm

9. If the length, height and L.S.A of a cuboid are 20.00 cm, 6.00 cm and 468.00 sq.cm respectively, its T.S.A is



(i) 1468.00 sq.cm (ii) 1408.00 sq.cm (iii) 1178.00 sq.cm (iv) 1228.00 sq.cm (v) 968.00 sq.cm

10. If the base radius of a cone is 7.00 cm and slant height is 9.90 cm, its base area is

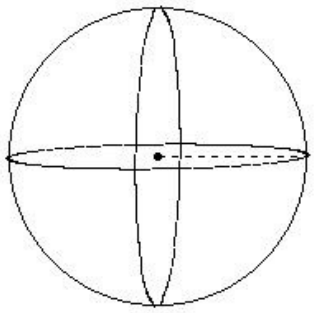


(i) 136.00 sq.cm (ii) 154.00 sq.cm (iii) 167.00 sq.cm (iv) 181.00 sq.cm (v) 149.00 sq.cm

11. A metallic sphere of radius 16.00 cm is melted to recast into the shape of a cylinder of radius 19.00 cm . Find the height of the cylinder.

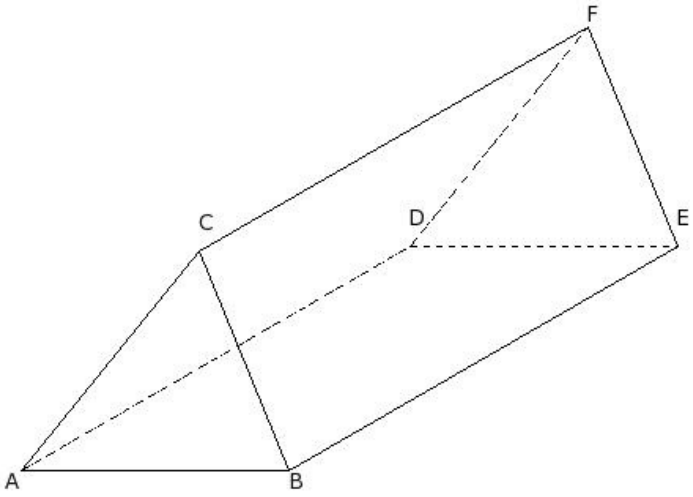
(i) 20.13 cm (ii) 12.13 cm (iii) 18.13 cm (iv) 10.13 cm (v) 15.13 cm

12. If the radius of a sphere is 9.00 cm, its T.S.A is



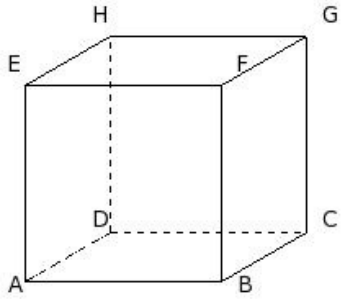
(i) 868.29 sq.cm (ii) 1198.29 sq.cm (iii) 888.29 sq.cm (iv) 1018.29 sq.cm (v) 1158.29 sq.cm

13. If the three sides of a triangular prism are 17.00 cm, 15.00 cm, 18.00 cm and height is 57.00 cm, its L.S.A is



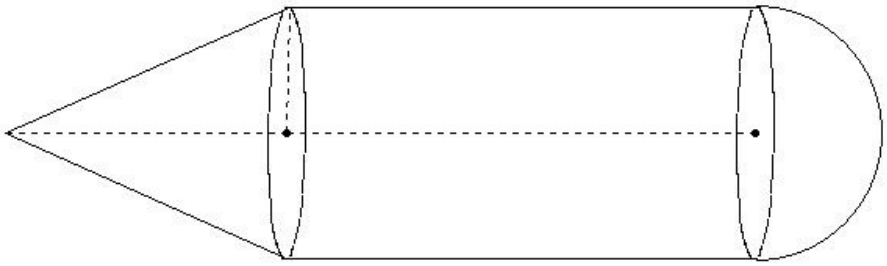
(i) 2780.00 sq.cm (ii) 2710.00 sq.cm (iii) 2850.00 sq.cm (iv) 3020.00 sq.cm (v) 3010.00 sq.cm

14. If the L.S.A of a cube is 576.00 sq.cm, its T.S.A is



(i) 864.00 sq.cm (ii) 880.00 sq.cm (iii) 879.00 sq.cm (iv) 861.00 sq.cm (v) 847.00 sq.cm

15. 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 8.00 cm and 30.00 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 18.00 cm



(i) 2546.17 sq.cm (ii) 2226.17 sq.cm (iii) 2246.17 sq.cm (iv) 2656.17 sq.cm (v) 2406.17 sq.cm

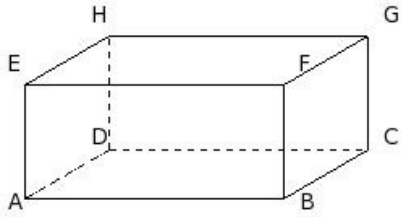
16. An ice cream container has the shape of a right circular cylinder having inner diameter 22.00 cm and height 32.00 cm . The ice cream is filled into cones of diameter 11.00 cm and height 19.00 cm , having a hemispherical shape on the top. Find the number of such complete cones which can be filled with ice cream

(i) 12 (ii) 9 (iii) 17 (iv) 15 (v) 7

17. A cylindrical vessel of base radius 24.00 cm contains water . A solid sphere of radius 16.00 cm is immersed completely in the water. Find the rise in the water level in the vessel

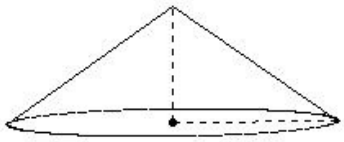
(i) 10.48 cm (ii) 9.48 cm (iii) 8.48 cm (iv) 7.48 cm (v) 11.48 cm

18. If the length, breadth and L.S.A of a cuboid are 16.00 cm, 12.00 cm and 392.00 sq.cm respectively, its volume is



(i) 1184.00 cu.cm (ii) 1524.00 cu.cm (iii) 1484.00 cu.cm (iv) 1214.00 cu.cm (v) 1344.00 cu.cm

19. If the base radius of a cone is 10.00 cm and slant height is 12.21 cm, its T.S.A is

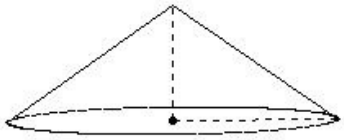


(i) 672.03 sq.cm (ii) 711.03 sq.cm (iii) 690.03 sq.cm (iv) 698.03 sq.cm

20. A solid metallic cylinder of base radius 13.50 cm and height 5.00 cm is melted to form cones each of height 1.00 cm and radius 1.00 cm . Find the number of complete cones formed

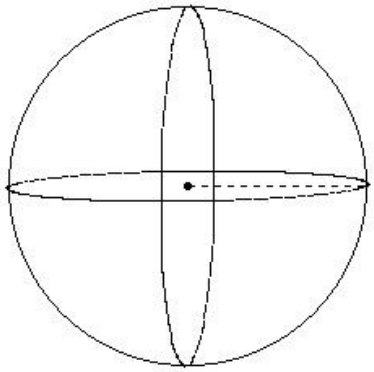
(i) 2733 (ii) 2973 (iii) 2603 (iv) 2813 (v) 2593

21. If the base radius of a cone is 10.00 cm and vertical height is 7.00 cm, its base area is



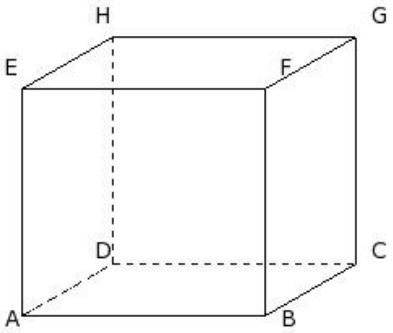
(i) 326.29 sq.cm (ii) 296.29 sq.cm (iii) 314.29 sq.cm (iv) 309.29 sq.cm (v) 321.29 sq.cm

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



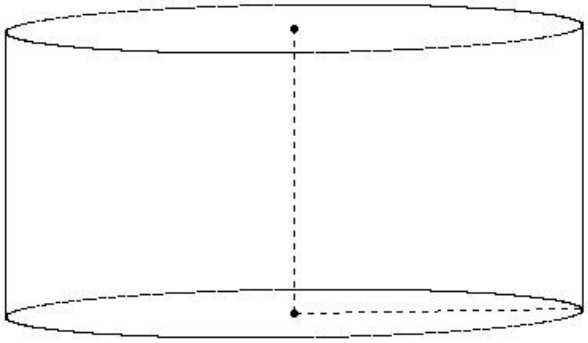
(i) 1391.14 sq.cm (ii) 1741.14 sq.cm (iii) 1701.14 sq.cm (iv) 1481.14 sq.cm (v) 1521.14 sq.cm

23. If the length, breadth and volume of a cuboid are 15.00 cm, 13.00 cm and 2730.00 cu.cm respectively, its T.S.A is



(i) 1014.00 sq.cm (ii) 994.00 sq.cm (iii) 1254.00 sq.cm (iv) 1174.00 sq.cm (v) 1344.00 sq.cm

24. If the radius of a cylinder is 18.00 cm and height is 18.00 cm, its volume is



(i) 19129.14 cu.cm (ii) 16829.14 cu.cm (iii) 19629.14 cu.cm (iv) 18329.14 cu.cm (v) 16929.14 cu.cm

25. The surface area of a solid metallic sphere is 1257.14 sq.cm. It is melted and recasted into solid right circular cones of radius 5.00 cm and height 3.00 cm . Find the number of complete cones that can be made

(i) 58 (ii) 48 (iii) 56 (iv) 53 (v) 50

Assignment Key

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