EduSahara™ Worksheet

Name : Chapter Based Worksheet

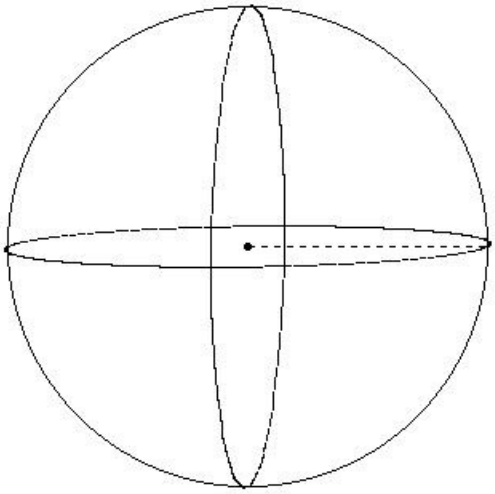
Chapter : Mensuration

Grade : SSC Grade X

1. A hollow metallic cylindrical tube has an internal radius of 10.50 cm and height 12.00 cm. The thickness of the metal is 1 cm .The tube is melted to cast into a right circular cone of height 6.00 cm. Find the radius of the cone.

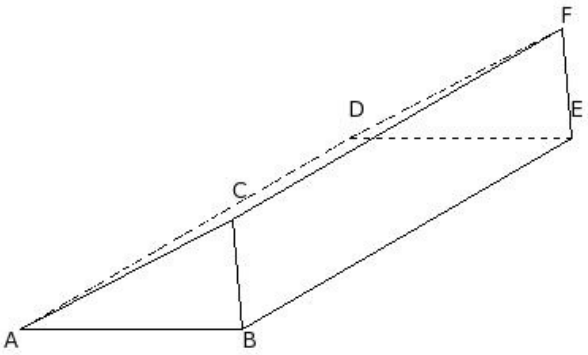
   (i) 16.49 cm (ii) 6.49 cm (iii) 8.49 cm (iv) 11.49 cm (v) 14.49 cm

2. If the radius of a sphere is 15.00 cm, its L.S.A is



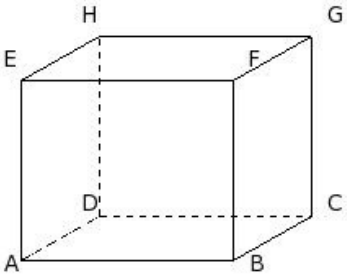
   (i) 2948.57 sq.cm (ii) 2758.57 sq.cm (iii) 2968.57 sq.cm (iv) 2578.57 sq.cm (v) 2828.57 sq.cm

3. If the three sides of a triangular prism are 14.00 cm, 7.00 cm, 15.00 cm and L.S.A is 1728.00 sq.cm, its T.S.A is



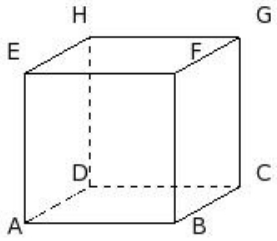
   (i) 2065.48 sq.cm (ii) 1555.48 sq.cm (iii) 1825.48 sq.cm (iv) 1785.48 sq.cm (v) 1875.48 sq.cm

4. If the length, breadth and L.S.A of a cuboid are 13.00 cm, 11.00 cm and 528.00 sq.cm respectively, its height is



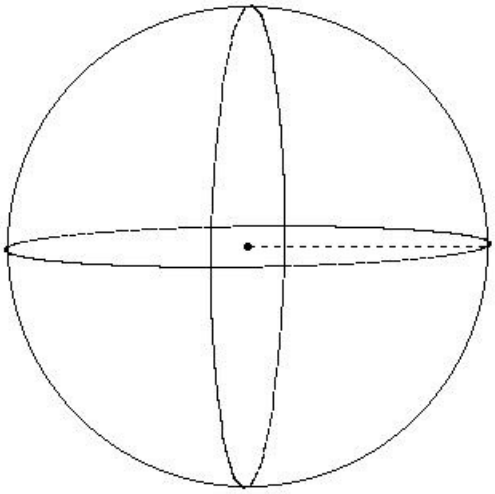
   (i) 6.00 cm (ii) 8.00 cm (iii) 11.00 cm (iv) 16.00 cm (v) 14.00 cm

5. If the volume of a cube is 729.00 cu.cm, its L.S.A is



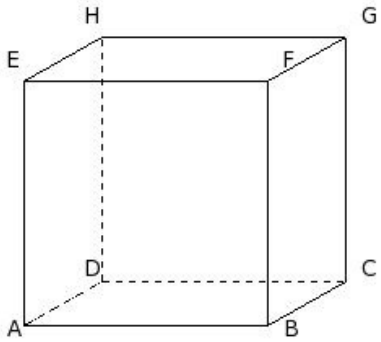
(i) 324.00 sq.cm (ii) 318.00 sq.cm (iii) 331.00 sq.cm (iv) 349.00 sq.cm (v) 312.00 sq.cm

6. If the T.S.A of a sphere is 2828.57 sq.cm, its L.S.A is



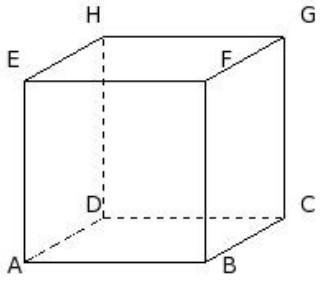
(i) 2778.57 sq.cm (ii) 2898.57 sq.cm (iii) 2588.57 sq.cm (iv) 2828.57 sq.cm (v) 3008.57 sq.cm

7. If the length, height and L.S.A of a cuboid are 15.00 cm, 15.00 cm and 780.00 sq.cm respectively, its breadth is



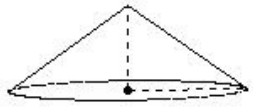
(i) 16.00 cm (ii) 11.00 cm (iii) 14.00 cm (iv) 6.00 cm (v) 8.00 cm

8. If the volume of a cube is 1331.00 cu.cm, its T.S.A is



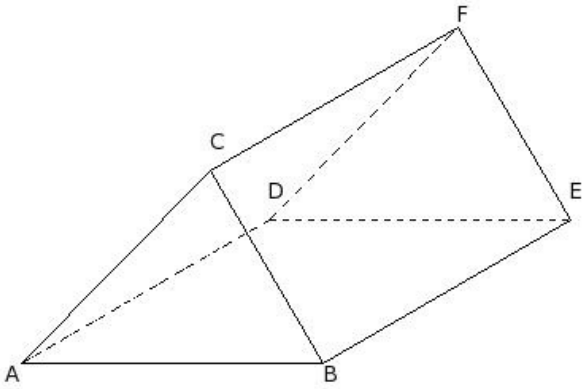
(i) 740.00 sq.cm (ii) 709.00 sq.cm (iii) 724.00 sq.cm (iv) 726.00 sq.cm

9. If the base radius of a cone is 7.00 cm and slant height is 8.60 cm, its volume is



(i) 280.67 cu.cm (ii) 268.67 cu.cm (iii) 231.67 cu.cm (iv) 256.67 cu.cm (v) 253.67 cu.cm

10. If the three sides of a triangular prism are 19.00 cm, 14.00 cm, 17.00 cm and volume is 4136.04 cu.cm, its base area is

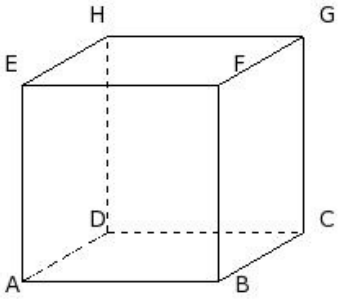


(i) 112.89 sq.cm (ii) 129.89 sq.cm (iii) 130.89 sq.cm (iv) 114.89 sq.cm (v) 88.89 sq.cm

11. A copper rod of diameter 0.20 cm and length 18.00 cm is drawn into a wire of length 4.50 m of uniform thickness. Find the thickness of the wire.

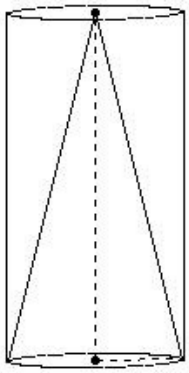
(i) 0 cm (ii) $\frac{1}{25}$ cm (iii) $\frac{3}{50}$ cm (iv) $\frac{1}{50}$ cm (v) $\frac{2}{25}$ cm

12. If the side of a cube is 12.00 cm, its L.S.A is



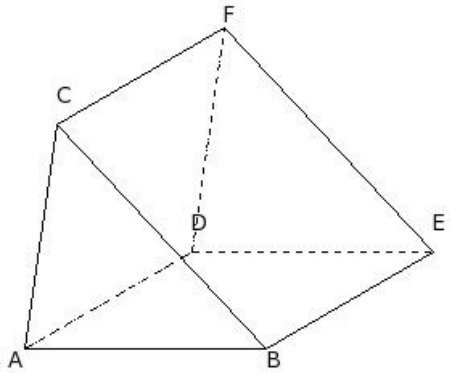
(i) 552.00 sq.cm (ii) 576.00 sq.cm (iii) 568.00 sq.cm (iv) 588.00 sq.cm (v) 592.00 sq.cm

13. From a circular cylinder of diameter 10.00 cm and height 20.00 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.



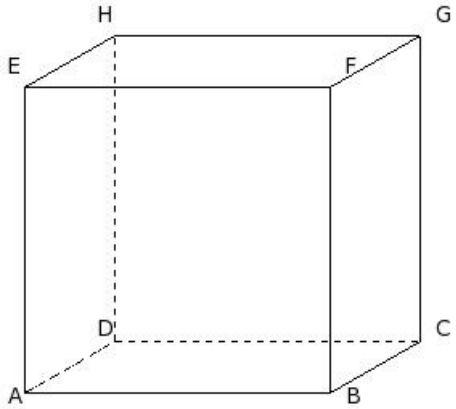
(i) 1091.17 sq.cm (ii) 901.17 sq.cm (iii) 1291.17 sq.cm (iv) 1031.17 sq.cm (v) 911.17 sq.cm

14. If the three sides of a triangular prism are 15.00 cm, 19.00 cm, 14.00 cm and height is 24.00 cm, its volume is



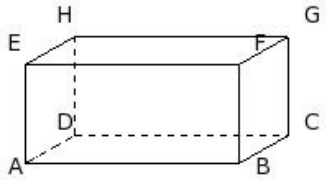
(i) 2724.08 cu.cm (ii) 2494.08 cu.cm (iii) 2474.08 cu.cm (iv) 2354.08 cu.cm (v) 2664.08 cu.cm

15. If the length, breadth and L.S.A of a cuboid are 19.00 cm, 13.00 cm and 1216.00 sq.cm respectively, its T.S.A is



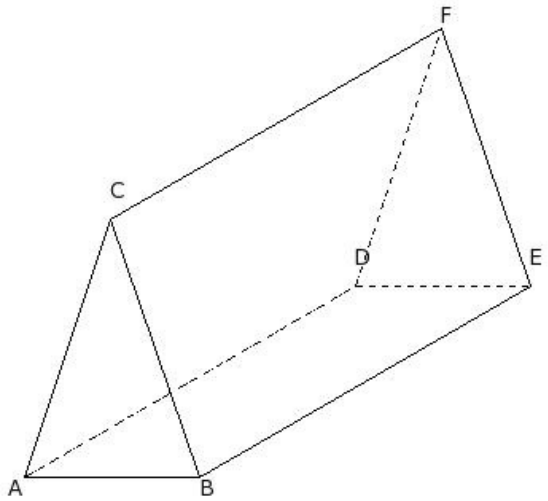
(i) 1480.00 sq.cm (ii) 1710.00 sq.cm (iii) 1560.00 sq.cm (iv) 1830.00 sq.cm

16. If the length, height and T.S.A of a cuboid are 13.00 cm, 6.00 cm and 422.00 sq.cm respectively, its L.S.A is



(i) 265.00 sq.cm (ii) 240.00 sq.cm (iii) 217.00 sq.cm (iv) 234.00 sq.cm (v) 258.00 sq.cm

17. If the L.S.A of a triangular prism is 2160.00 sq.cm, base area is 88.47 sq.cm and base perimeter is 45.00 cm, its T.S.A is

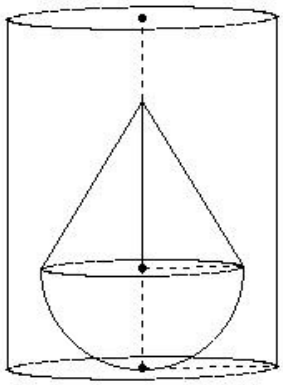


(i) 2176.94 sq.cm (ii) 2496.94 sq.cm (iii) 2456.94 sq.cm (iv) 2206.94 sq.cm (v) 2336.94 sq.cm

18. A cylindrical vessel of base radius 25.00 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

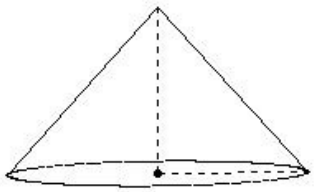
(i) 7.74 cm (ii) 10.74 cm (iii) 6.74 cm (iv) 9.74 cm (v) 8.74 cm

19. A solid consisting of a right circular cone, standing on a hemisphere is placed upright, in a right circular cylinder full of water and touches the bottom. The radius of the cylinder is 8.00 cm and height is 21.00 cm. The radius of the hemisphere is 6.00 cm and the height of the cone is 10.00 cm. Find the volume of water left in the cylinder.



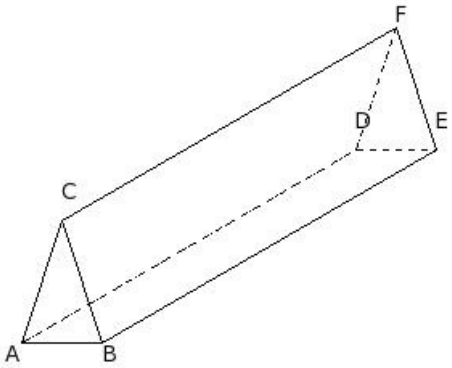
(i) 3394.29 cu.cm (ii) 3544.29 cu.cm (iii) 3164.29 cu.cm (iv) 3234.29 cu.cm (v) 3414.29 cu.cm

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



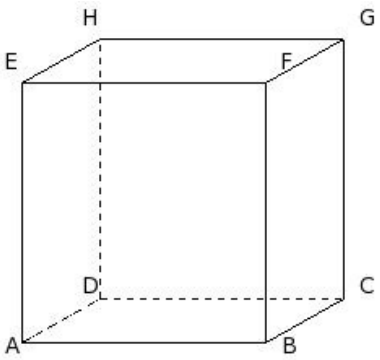
(i) 649.01 sq.cm (ii) 617.01 sq.cm (iii) 648.01 sq.cm (iv) 613.01 sq.cm (v) 635.01 sq.cm

21. If the L.S.A of a triangular prism is 1008.00 sq.cm, T.S.A is 1046.00 sq.cm and height is 48.00 cm, its base perimeter is



(i) 21.00 cm (ii) 24.00 cm (iii) 16.00 cm (iv) 18.00 cm (v) 26.00 cm

22. If the length, height and L.S.A of a cuboid are 15.00 cm, 16.00 cm and 832.00 sq.cm respectively, its volume is



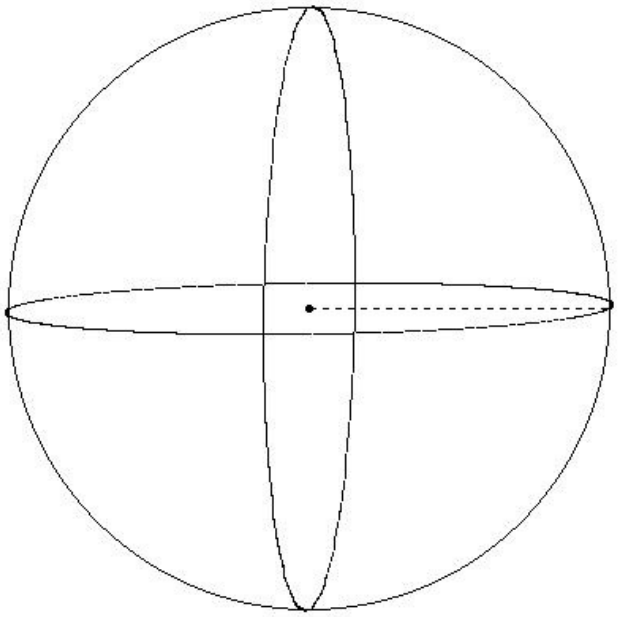
(i) 2780.00 cu.cm (ii) 2390.00 cu.cm (iii) 2640.00 cu.cm (iv) 2460.00 cu.cm (v) 2760.00 cu.cm

23. A farmer connects a pipe of internal diameter 36 cm from a canal into a cylindrical tank in his field, which is 18 m in diameter and 2 m deep.

If water flows through the pipe at the rate of $\frac{50}{7}$ kmph, in how much time will the tank be filled ?

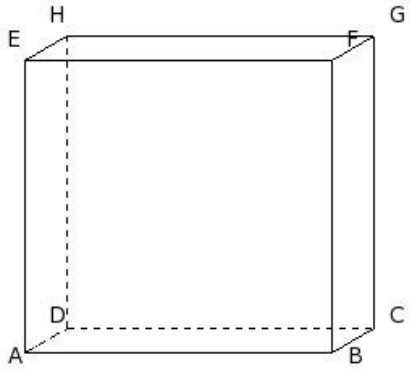
(i) 47.00 min (ii) 39.00 min (iii) 42.00 min (iv) 37.00 min (v) 45.00 min

24. If the radius of a sphere is 19.00 cm, its volume is



(i) 28742.48 cu.cm (ii) 31542.48 cu.cm (iii) 30042.48 cu.cm (iv) 27242.48 cu.cm (v) 27942.48 cu.cm

25. If the length, breadth and height of a cuboid are 19.00 cm, 6.00 cm and 18.00 cm respectively, its volume is



(i) 2052.00 cu.cm (ii) 2082.00 cu.cm (iii) 1892.00 cu.cm (iv) 2282.00 cu.cm

Assignment Key

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