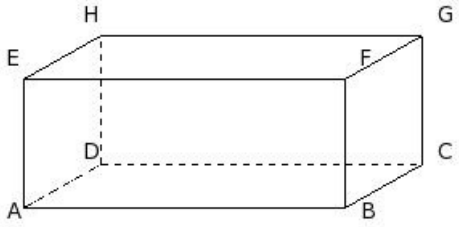
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Surface areas and Volumes

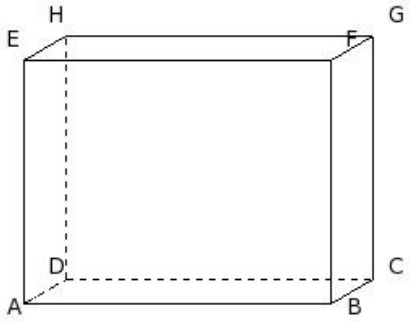
Grade : SSC Grade IX

1. If the length, height and T.S.A of a cuboid are 20.00 cm, 8.00 cm and 936.00 sq.cm respectively, its volume is



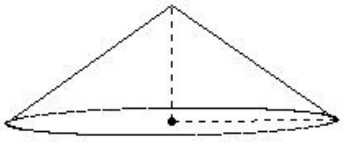
(i) 1920.00 cu.cm (ii) 1640.00 cu.cm (iii) 1600.00 cu.cm (iv) 1830.00 cu.cm (v) 1760.00 cu.cm

2. If the length, breadth and height of a cuboid are 19.00 cm, 6.00 cm and 15.00 cm respectively, its L.S.A is



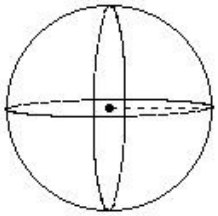
(i) 725.00 sq.cm (ii) 750.00 sq.cm (iii) 773.00 sq.cm (iv) 733.00 sq.cm (v) 768.00 sq.cm

3. If the base radius of a cone is 10.00 cm and T.S.A is 698.03 sq.cm, its L.S.A. is



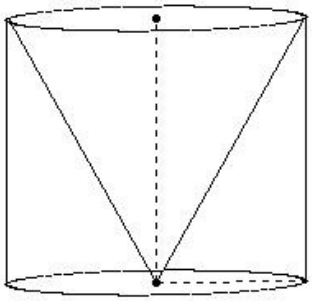
(i) 405.74 sq.cm (ii) 366.74 sq.cm (iii) 390.74 sq.cm (iv) 383.74 sq.cm (v) 371.74 sq.cm

4. If the volume of a sphere is 905.14 cu.cm, its T.S.A is



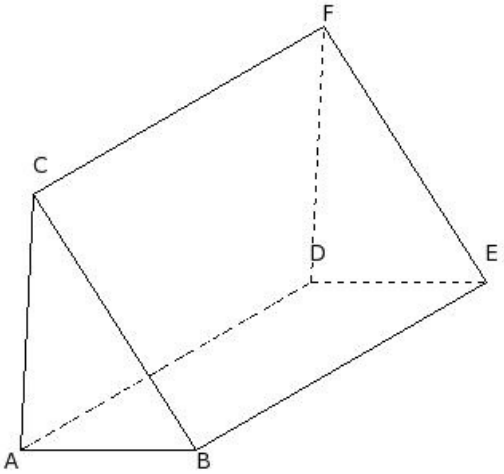
(i) 428.57 sq.cm (ii) 448.57 sq.cm (iii) 479.57 sq.cm (iv) 452.57 sq.cm (v) 464.57 sq.cm

5. From a circular cylinder of diameter 18.00 cm and height 16.00 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.



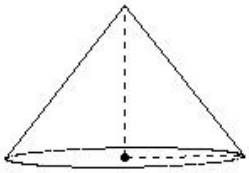
(i) 1399.04 sq.cm (ii) 1649.04 sq.cm (iii) 1839.04 sq.cm (iv) 1679.04 sq.cm

6. If the L.S.A of a triangular prism is 1932.00 sq.cm, base area is 87.91 sq.cm and base perimeter is 46.00 cm, its T.S.A is



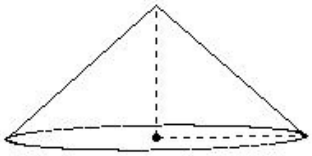
(i) 2107.82 sq.cm (ii) 2087.82 sq.cm (iii) 2277.82 sq.cm (iv) 1927.82 sq.cm (v) 2267.82 sq.cm

7. If the slant height of a cone is 11.40 cm and L.S.A is 250.80 sq.cm, its volume is



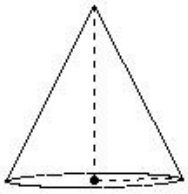
(i) 459.00 cu.cm (ii) 469.00 cu.cm (iii) 462.00 cu.cm (iv) 474.00 cu.cm (v) 447.00 cu.cm

8. If the base radius of a cone is 9.00 cm and vertical height is 8.00 cm, its T.S.A is



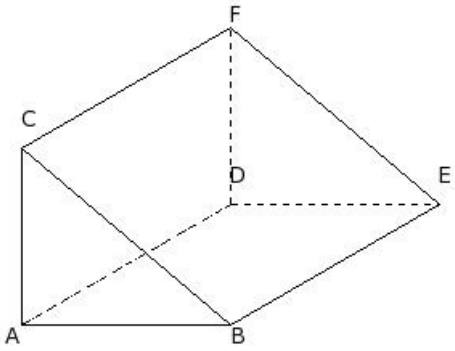
(i) 579.13 sq.cm (ii) 608.13 sq.cm (iii) 577.13 sq.cm (iv) 620.13 sq.cm (v) 595.13 sq.cm

9. If the vertical height of a cone is 10.00 cm and volume is 261.90 cu.cm, its T.S.A is



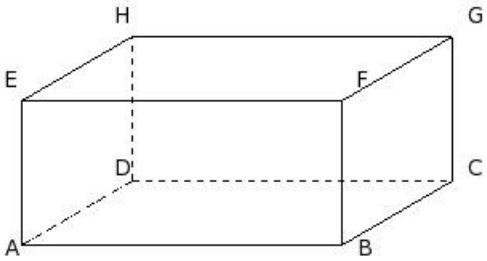
(i) 227.26 sq.cm (ii) 277.26 sq.cm (iii) 252.26 sq.cm (iv) 254.26 sq.cm (v) 259.26 sq.cm

10. If the three sides of a triangular prism are 13.00 cm, 17.00 cm, 11.00 cm and volume is 2145.00 cu.cm, its L.S.A is



(i) 1060.00 sq.cm (ii) 1410.00 sq.cm (iii) 1230.00 sq.cm (iv) 990.00 sq.cm (v) 1390.00 sq.cm

11. If the breadth, height and volume of a cuboid are 16.00 cm, 9.00 cm and 2880.00 cu.cm respectively, its T.S.A is

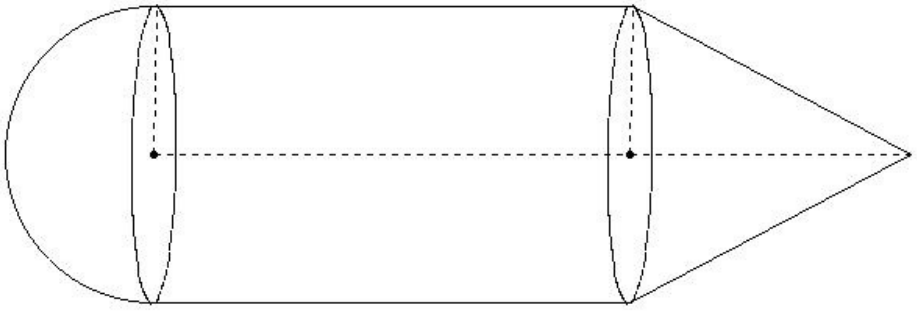


(i) 1138.00 sq.cm (ii) 1288.00 sq.cm (iii) 1248.00 sq.cm (iv) 1568.00 sq.cm (v) 1348.00 sq.cm

12. A copper rod of diameter 0.20 cm and length 12.00 cm is drawn into a wire of length 1.92 m of uniform thickness. Find the thickness of the wire.

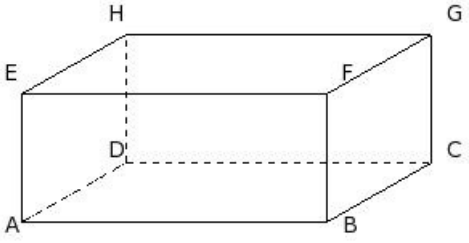
(i) $\frac{1}{10}$ cm (ii) $\frac{1}{40}$ cm (iii) $\frac{1}{20}$ cm (iv) 0 cm (v) $\frac{3}{40}$ cm

13. 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 30.50 cm respectively. The radii of the hemispherical and conical parts are the same as that of the cylindrical part. Calculate the volume of the solid, if the height of the conical part is 18.00 cm



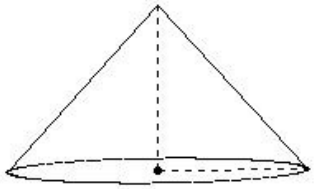
(i) 11749.37 cu.cm (ii) 10349.37 cu.cm (iii) 13849.37 cu.cm (iv) 12149.37 cu.cm

14. If the length, breadth and height of a cuboid are 19.00 cm, 15.00 cm and 8.00 cm respectively, its T.S.A is



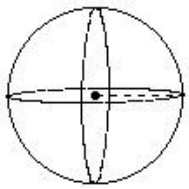
(i) 874.00 sq.cm (ii) 1084.00 sq.cm (iii) 1234.00 sq.cm (iv) 1264.00 sq.cm (v) 1114.00 sq.cm

15. If the slant height of a cone is 13.45 cm and vertical height is 10.00 cm, its T.S.A is



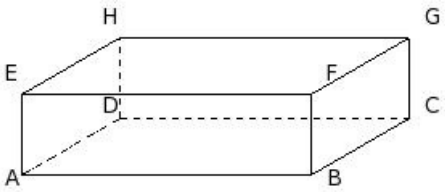
(i) 622.01 sq.cm (ii) 619.01 sq.cm (iii) 663.01 sq.cm (iv) 635.01 sq.cm (v) 648.01 sq.cm

16. If the radius of a sphere is 5.00 cm, its L.S.A is



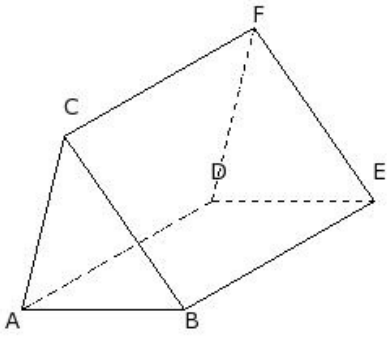
(i) 297.29 sq.cm (ii) 302.29 sq.cm (iii) 314.29 sq.cm (iv) 318.29 sq.cm (v) 329.29 sq.cm

17. If the breadth, height and L.S.A of a cuboid are 14.00 cm, 5.00 cm and 320.00 sq.cm respectively, its volume is



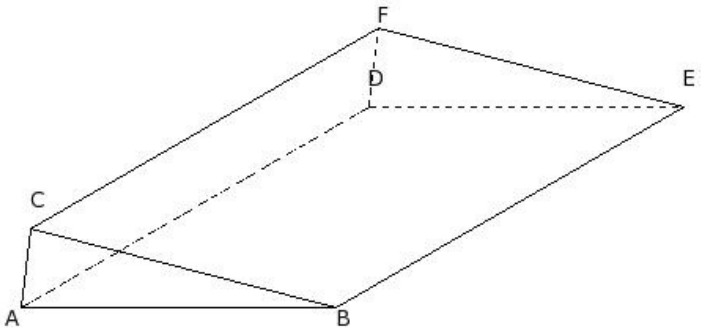
(i) 1430.00 cu.cm (ii) 1260.00 cu.cm (iii) 1090.00 cu.cm (iv) 1100.00 cu.cm (v) 1510.00 cu.cm

18. If the L.S.A of a triangular prism is 918.00 sq.cm, base area is 53.44 sq.cm and height is 27.00 cm, its base perimeter is



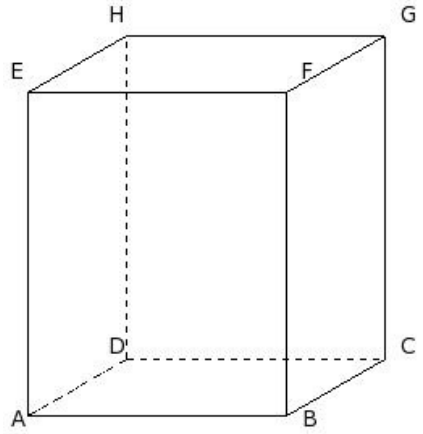
(i) 31.00 cm (ii) 39.00 cm (iii) 37.00 cm (iv) 29.00 cm (v) 34.00 cm

19. If the three sides of a triangular prism are 20.00 cm, 20.00 cm, 5.00 cm and height is 51.00 cm, its T.S.A is



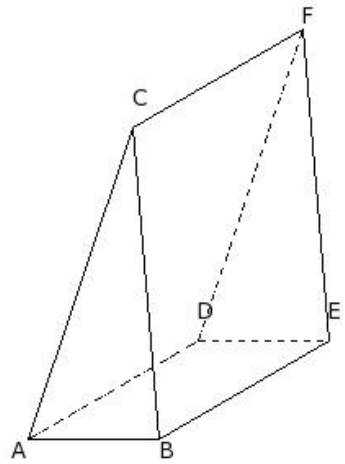
(i) 2524.22 sq.cm (ii) 2254.22 sq.cm (iii) 2394.22 sq.cm (iv) 2654.22 sq.cm (v) 2144.22 sq.cm

20. If the breadth, height and T.S.A of a cuboid are 14.00 cm, 20.00 cm and 1648.00 sq.cm respectively, its L.S.A is



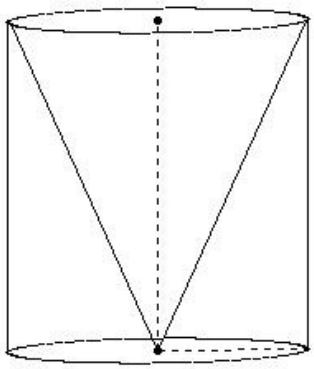
(i) 1130.00 sq.cm (ii) 920.00 sq.cm (iii) 1200.00 sq.cm (iv) 1230.00 sq.cm (v) 1350.00 sq.cm

21. If the base perimeter of a triangular prism is 47.00 cm, base area is 75.74 sq.cm and height is 24.00 cm, its volume is



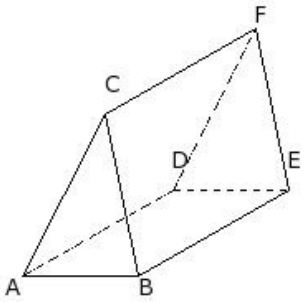
(i) 1987.76 cu.cm (ii) 1817.76 cu.cm (iii) 1997.76 cu.cm (iv) 1567.76 cu.cm (v) 1777.76 cu.cm

22. From a circular cylinder of diameter 18.00 cm and height 20.00 cm, a conical cavity of the same base radius and of the same height is hollowed out. Find the volume of the remaining solid.



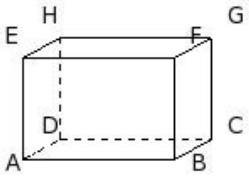
(i) 3514.29 cu.cm (ii) 3354.29 cu.cm (iii) 3394.29 cu.cm (iv) 3224.29 cu.cm

23. If the three sides of a triangular prism are 7.00 cm, 10.00 cm, 11.00 cm and L.S.A is 588.00 sq.cm, its volume is



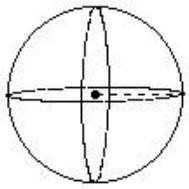
(i) 704.09 cu.cm (ii) 703.09 cu.cm (iii) 720.09 cu.cm (iv) 742.09 cu.cm (v) 722.09 cu.cm

24. If the length, breadth and L.S.A of a cuboid are 9.00 cm, 5.00 cm and 168.00 sq.cm respectively, its volume is



(i) 256.00 cu.cm (ii) 285.00 cu.cm (iii) 294.00 cu.cm (iv) 268.00 cu.cm (v) 270.00 cu.cm

25. If the radius of a sphere is 5.00 cm, its volume is



(i) 511.81 cu.cm (ii) 523.81 cu.cm (iii) 548.81 cu.cm (iv) 540.81 cu.cm

Assignment Key

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