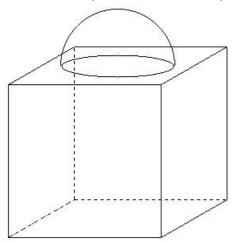
Name: Surface Area of a Combination of Solids

Chapter : Mensuration
Grade : SSC Grade X

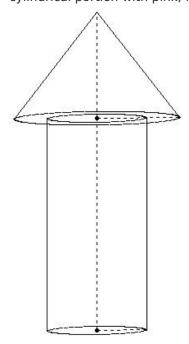
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1. If two solids, a cube and a hemisphere are combined such that the base of the block is a cube with edge 19.00 cm and the hemisphere fixed on the top has a diameter of 14.00 cm, find the total surface area of the block.



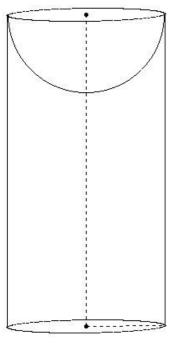
(i) 2080.00 sq.cm (ii) 2160.00 sq.cm (iii) 2390.00 sq.cm (iv) 2320.00 sq.cm (v) 2570.00 sq.cm

A wooden toy rocket is in the shape of a cone mounted on a cylinder. The height of the conical part is 13.00 cm, while the height of the cylindrical part is 26.00 cm. The base of the conical portion has a diameter of 20.00 cm while the base diameter of the cylindrical portion is 12.00 cm. If the conical portion is painted with black and cylindrical portion with pink, find the area of the rocket painted with each of these colors



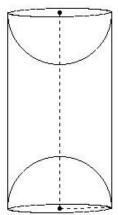
- (i) blackarea = 718.57 sq.cm, pinkarea = 1095.71 sq.cm
- (ii) blackarea = 717.57 sq.cm, pinkarea = 1094.71 sq.cm
- (iii) blackarea = 716.57 sq.cm, pinkarea = 1093.71 sq.cm
- (iv) blackarea = 714.57 sq.cm, pinkarea = 1091.71 sq.cm
- (v) blackarea = 715.57 sq.cm, pinkarea = 1092.71 sq.cm

3. A hemispherical depression is cut out from one face of a cylinder. The height of the cylinder is 38.00 cm and its radius is 9.50 cm. Find the total surface area of the solid



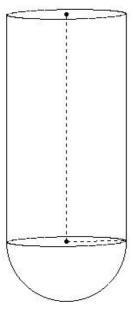
(i) 3300.07 sq.cm (ii) 3120.07 sq.cm (iii) 3390.07 sq.cm (iv) 2990.07 sq.cm (v) 2960.07 sq.cm

4. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 23.00 cm and its radius is 6.00 cm. Find the total surface area of the solid



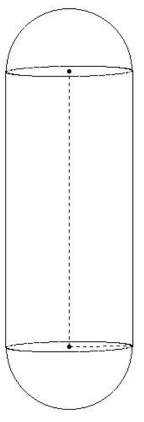
(i) 1590.00 sq.cm (ii) 1340.00 sq.cm (iii) 1170.00 sq.cm (iv) 1320.00 sq.cm (v) 1160.00 sq.cm

5. A solid consists of a cylinder with one hemispherical end with length 27.00 cm and diameter 14.00 cm. Find the total surface area of the solid



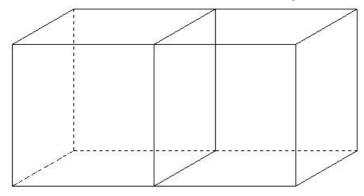
(i) 1810.00 sq.cm (ii) 1650.00 sq.cm (iii) 1690.00 sq.cm (iv) 1480.00 sq.cm

6. A solid consists of a cylinder with two hemispherical ends with length 33.00 cm and diameter 15.00 cm. Find the total surface area of the solid



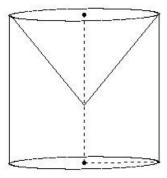
(i) 2222.86 sq.cm (ii) 2262.86 sq.cm (iii) 2422.86 sq.cm (iv) 2342.86 sq.cm (v) 2142.86 sq.cm

7. Two cubes each of volume 5832.00 cu.cm are joined end to end . Find the surface area of the resulting cuboid.



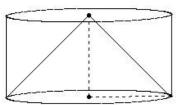
(i) 3410.00 sq.cm (ii) 3120.00 sq.cm (iii) 3240.00 sq.cm (iv) 3400.00 sq.cm (v) 3070.00 sq.cm

8. From a solid cylinder of height 18.00 cm and base radius 9.00 cm, a conical cavity of height 11.00 cm and base radius 9.00 cm is drilled out. Find the total surface area of the resulting solid



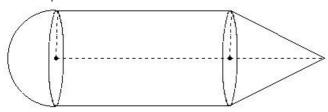
(i) 1844.80 sq.cm (ii) 1414.80 sq.cm (iii) 1674.80 sq.cm (iv) 1654.80 sq.cm

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



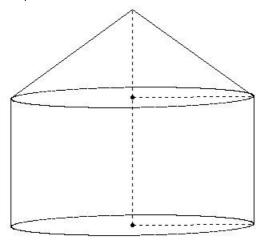
(i) 1387.26 sq.cm (ii) 1267.26 sq.cm (iii) 1627.26 sq.cm (iv) 1307.26 sq.cm (v) 1427.26 sq.cm

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 6.00 cm and 22.00 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 12.00 cm



(i) 1309.06 sq.cm (ii) 1289.06 sq.cm (iii) 1059.06 sq.cm (iv) 1489.06 sq.cm (v) 1349.06 sq.cm

A tent is in the form of a cylinder surmounted by a cone., The height of the tent above the ground is 27 m and 11. the height of the cylindrical part is 16.00 m. If the diameter of the base is 30.00 m, find the quantity of canvas required to make the tent. Allow 12% extra for folds and for stitching.



(i) 2441.68 sq.m (ii) 2811.68 sq.m (iii) 2641.68 sq.m (iv) 2791.68 sq.m (v) 2671.68 sq.m

Assignment Key						
1) (iv)	2) (iii)	3) (ii)	4) (iv)	5) (ii)	6) (ii)	
7) (iii)	8) (iii)	9) (i)	10) (i)	11) (v)		

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