ABHYAS Academy,
Near Govt. College, Nishat Cinema Road,
Ambala Cantt., Haryana (India)
Phone: +91-171-2631595, +91-9416541198
e-Mail: anusethi1968@yahoo.com
www.abhyasonline.in

Assignment

Date: __ / __ / ____ **Name: _____** **Max Marks: 21**

Section-A (Three Marks Each)

1 A vessel is in the form of hollow hemisphere mounted by a hollow cylinder. The diameter of the hemisphere is 14cm and the total height of the vessel is 13cm. Find the inner surface area of the vessel.

2 A toy is in the form of a cone of radius 3.5cm mounted on a hemisphere of same radius. The total height of the toy is 15.5cm. Find the total surface area of the toy.

3 A hemispherical depression is cut out from one face of a cubical wooden block such that the diameter of l of the hemisphere is equal to the edge of the cube. Determine the surface area of remaining solid.

4 A medicine capsule is in the form of a cylinder with two hemispheres stuck at its end. The length of the entire capsule is 14mm and the diameter of the capsule is 5mm. Find its volume.

5 From a solid cylinder whose height is 2.4cm and diameter 1.4cm, a conical cavity of the same height and same radius is hollowed out. Find the surface area of remaining solid and also calculate the amount of water it can hold (in cm^3).

6 From a solid cuboid of dimension 10mX15mX20m smaller cubes are made each of edge 5m. Calculate the number of cubes that can be made and the total surface area of each smaller cube.

7 A solid is in the form of a cone standing on a hemisphere with both their radii equal to 1 cm and the height of the cone equal to its radius. Find the volume of the solid in terms of π.