1. The dimensions of a prayer Hall are 20m x 15m x 8m. Find the cost of painting its walls at Rs.10 per m^2.
2. Find the curved surface area of a right circular cylinder whose height is 13.5 cm and radius of tisbase is 7 cm. Also find its surface area.
3. The exterior diameter of an iron pipe is 25cm and it is one cm thick. Find the whole surface areof the pipe it is 21cm long.
4. A roller 150 cm long has a diameter of 70 cm. To level a playground, it takes 750 complete revolutions. Determine the cost of leveling the playground at the rate of 75 paise per m^2.
5. Find the total surface area of a cone, if its slant height is 21 cm and the diameter of its base is 24cm.
6. A river, 3 m deep and 40m wide, is flowing at the rate of 2km/hr. How much water will fall into the sea in a minute?
7. Find the capacity in litres of a conical vessel whose diameter is 14 cm and slant height is 25 cm.
8. What is the total surface area of a hemisphere of base radius 7cm?
9. A village having a population of 4000, requires 150 litres of water per head per day. It has a tank measuring 20m x 15m x 6m. For how many days, the water of the tank will be sufficient for the village?
10. Mary wants to decorate her Christmas tree. She wants to place the tree on a wooden box covered with coloured paper with picture of Santa Claus on it. She must know the exact quantity of paper to buy for this purpose. If the box has length, breadth and height as 80 cm, 40 cm and 20 cm respectively how many square sheets of paper of side 40 cm would she require?
11. Hameed has built a cubical water tank with lid for his house, with each outer edge 1.5 m long. He gets the outer surface of the tank excluding the base, covered with square tiles of side 25 cm. Find how much he would spend for the tiles, if the cost of the tiles is Rs 360 per dozen.
12. A small indoor greenhouse (herbarium) is made entirely of glass panes (including base) held together with tape. It is 30 cm long, 25 cm wide and 25 cm high. (i) What is the area of the glass? (ii) How much of tape is needed for all the 12 edges?
13. A small village, having a population of 5000, requires 75 litres of water per head per day. The village has got an overhead tank of measurement 40 m $\times$ 25 m $\times$ 15 m. For how many days will the water of this tank last?
14. A shopkeeper has one spherical laddoo of radius 5cm. With the same amount of material, how many laddoos of radius 2.5 cm can be made?
15. A right triangle with sides 6 cm, 8 cm and 10 cm is revolved about the side 8 cm. Find the volume and the curved surface of the solid so formed.
16. Rain water which falls on a flat rectangular surface of length 6 m and breadth 4 m is transferred into a cylindrical vessel of internal radius 20 cm. What will be the height of water in the cylindrical vessel if the rain fall is 1 cm. Give your answer to the nearest integer. (Take $\pi = 3.14$)
17. A cylindrical tube opened at both the ends is made of iron sheet which is 2 cm thick. If the outer diameter is 16 cm and its length is 100 cm, find how many cubic centimeters of iron has been used in making the tube?
18. A semi-circular sheet of metal of diameter 28cm is bent to form an open conical cup. Find the capacity of the cup.
19. The water for a factory is stored in a hemispherical tank whose internal diameter is 14 m. Thetank contains 50 kilolitres of water. Water is pumped into the tank to fill to its capacity. Calculate the volume of water pumped into the tank.
20. The volumes of the two spheres are in the ratio 64 : 27. Find the ratio of their surface areas.
21. A cube of side 4 cm contains a sphere touching its sides. Find the volume of the gap in between.
22. A sphere and a right circular cylinder of the same radius have equal volumes. By whatpercentage does the diameter of the cylinder exceed its height?
23. 30 circular plates, each of radius 14 cm and thickness 3cm are placed one above the another toform a cylindrical solid. Find: (i) the total surface area (ii) volume of the cylinder so formed.
24. A hemispherical tank is made up of an iron sheet 1 cm thick. If the inner radius is 1 m, then findthe volume of the iron used to make the tank.