Practice Assignment 2A

1. The curved surface area of a right circular cylinder of height 21 cm is 132 cm^2. Find the diameter of the base of the cylinder $\left[\text{Assume } \pi = \dfrac{22}{7}\right]$.

2. A metal pipe is 70 cm long. The inner diameter of a cross section is 6 cm, the outer diameter being 6.6 cm. Find its total surface area $\left[\text{Assume } \pi = \dfrac{22}{7}\right]$.

3. Find the total surface area of a cone, if its slant height is 26 m and diameter of its base is 20 m $\left[\text{Assume } \pi = \dfrac{22}{7}\right]$.

4. Find the total surface area of a hemisphere of radius 15 cm $\left[\text{Use } \pi = 3.14\right]$.

5. Find the radius of a sphere whose surface area is 616 cm^2 $\left[\text{Assume } \pi = \dfrac{22}{7}\right]$.

6. A cuboidal vessel is 12 m long and 15 m wide. How high must it be made to hold 1260 cubic metres of a liquid?

7. The inner diameter of a cylindrical wooden pipe is 26 cm and its outer diameter is 30 cm. The length of the pipe is 21 cm. Find the mass of the pipe, if 1 cm^3 of wood has a mass of 0.8 g $\left[\text{Assume } \pi = \dfrac{22}{7}\right]$.

8. The height of a cone is 18 cm. If its volume is 16956 cm^3, find the radius of the base $\left[\text{Use } \pi = 3.14\right]$.

9. The diameter of a metallic ball is 2.8 cm. What is the mass of the ball, if the density of the metal is 9 g per cm^3? $\left[\text{Assume } \pi = \dfrac{22}{7} \right]$.