

**Chapter Name:Khanaroopangal**

*Marks :(3)*

**Quest:**

The base radius and height of cylinder are 10 cm, 12 cm respectively.

a). Find its volume

b). Find the volume of the largest cone that can be carved out from this cylinder.

**Hint:**

a)Volume of the cylinder =  $\pi \times 10^2 \times 12 = 1200\pi$  (1)

b) Volume of the cone =  $1200 \frac{\pi}{3} = 400\pi$  (2)

**Chapter Name:Khanaroopangal**

*Marks :(5)*

**Quest:**

How many spheres of radius 3 cm can be made by melting and recasting a metal cone of radius 12 cm and height 15 cm?.

**Hint:**

Volume of the cone =  $720\pi$  cm<sup>3</sup> (2)

Volume of Sphere =  $36\pi$ cm<sup>3</sup> (2)

Numbrer of spheres =  $720\pi/36\pi = 20$  (1)