Solution: Yesterday 7/7/2024

Circumference = Length / turns

$= \frac{4400\,cm}{50}$

$= 88cm$

Diameter.

Radius

$\pi d = C$

$\frac{22}{7} d = 88cm \times 7$

$d = \frac{88cm \times 7}{22}$

$d = 4cm \times 7$

$d = 28cm$

Radius

$\frac{D}{2}$

$= \frac{28cm}{2}$

$= 14cm$

Volume

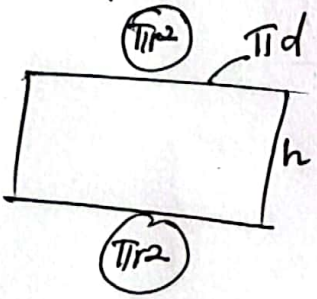
$\pi r^2 \times h$

$\left(\frac{22}{7} \times 14 \times 14 \times 20\right)$

$(44 \times 280)\,cm^3$

$= 12320\,cm^3$

b Total Surface Area



$2\pi r^2 + \pi d \times h$

$\left(2 \times \frac{22}{7} \times 14cm \times 14cm\right) + \left(\frac{22}{7} \times 28cm \times 20cm\right)$

$(44 \times 28cm^2) + (88cm \times 20cm)$

$= 1232cm^2 + 1760cm^2$

$= 2992cm^2$

(2) No of Space

Distance = No of space × Interval.

$= (23-7) \times 10m$

$= 16 \times 10m$

$= 160m$