

06.11.2019

EVERWIN VIDHYASHRAM

Marks: 20mar

STD: VII

TT - MATHS

Time: 40 min

I. Answer the following questions:

1. Circumference 2. Circumference 3. πr^2 sq. units
4. Radius 5. $C = 2\pi r$ units

II. Answer the following:

$$\begin{aligned} 6. \quad C &= 2\pi r \text{ units} \\ &= 2 \times \frac{22}{7} \times 35^5 \\ &= 44 \times 5 \\ &= 220\text{mm} \end{aligned}$$

$$\begin{aligned} 7. \quad \text{Area} &= \pi r^2 \text{ sq. units} \\ &= \frac{22}{7} \times 2.8^2 \times 2.8 \\ &= 8.8 \times 2.8 = 24.64\text{m}^2 \end{aligned}$$

8. Given:

$$\begin{aligned} C &= 88\text{m} \\ C &= 2\pi r \text{ units} \\ 88 &= 2 \times \frac{22}{7} \times r \end{aligned}$$

$$88 \times \frac{1}{2} \times \frac{7}{22} = r$$

$$r = \frac{28\text{m}^{14\text{m}}}{2} \quad r = 14\text{m}$$

$$\begin{aligned} 9. \quad \text{Area shaded region} &= \pi [R^2 - r^2] \text{ sq. units} \\ &= \frac{22}{7} [(21)^2 - (7)^2] \\ &= \frac{22}{7} [441 - 49] \\ &= \frac{22}{7} [392] \end{aligned}$$

$$\text{Area of the shaded region} = 1232\text{cm}^2.$$

10. Given:

$$\begin{aligned} r &= 14\text{cm} \\ C &= 2\pi r \text{ units} \\ &= 2 \times \frac{22}{7} \times 14^2 \end{aligned}$$

$$\begin{aligned} &= 22 \times 4 \\ C &= 88\text{cm} \end{aligned}$$

$$\begin{aligned} \text{No. of times} &= \frac{\text{Distance}}{\text{Circumference}} \\ &= \frac{1760^{20}}{88} = 20\text{times} \end{aligned}$$