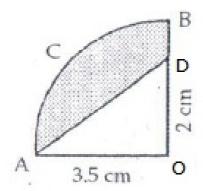


Question 36:



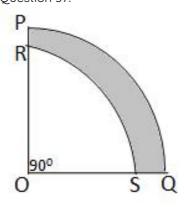
Shaded area = (area of quadrant) - (area of DAOD)

$$= \left[ \frac{1}{4} \pi r^2 - \frac{1}{2} \times h \times b \right]$$

$$= \left[ \frac{1}{4} \times \frac{22}{7} \times 3.5 \times 3.5 - \frac{1}{2} \times 2 \times 3.5 \right] \text{ cm}^2$$

$$= (9.625 - 3.5) \text{ cm}^2 = 6.125 \text{ cm}^2$$

Question 37:



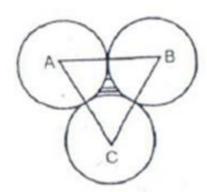
Area of flower bed = (area of quadrant OPQ) - (area of the quadrant ORS)

$$= \left[\frac{1}{4}\pi r_1^2 - \frac{1}{4}\pi r_2^2\right]$$

$$= \left[\frac{1}{4} \times \frac{22}{7} \times 21 \times 21 - \frac{1}{4} \times \frac{22}{7} \times 14 \times 14\right] m^2$$

$$= \left[346.5 - 154\right] m^2 = 192.5 m^2$$

Question 38:



Let A, B, C be the centres of these circles. Joint AB, BC, CA Required area=(area of  $\Delta$ ABC with each side a = 12 cm) - 3(area of sector with r = 6,  $\theta$  = 60°)

$$= \left[ \frac{\sqrt{3}}{4} \times (12)^2 - 3 \times \left( 3.14 \times (6)^2 \times \frac{60}{360} \right) \right]$$

$$= \left[ \frac{\sqrt{3}}{4} \times 12 \times 12 - 3 \times 3.14 \times 6 \right] \text{cm}$$

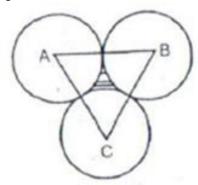
$$= (36 \times 1.73 - 56.52) \text{ cm}^2$$

$$= (62.28 - 56.52) \text{cm}^2$$

$$= 5.76 \text{ cm}^2$$

The area enclosed =  $5.76 \text{ cm}^2$ 

Question 39:



Let A, B, C be the centers of these circles. Join AB, BC, CA Required area= (area of  $\Delta$ ABC with each side 2) - 3[area of sector with r = a cm,  $\theta$  = 60°]

$$= \left[ \frac{\sqrt{3}}{4} \times (2a)^2 - \frac{3\pi a^2 \times 60}{360} \right]$$

$$= \left( 1.73a^2 - 1.57 \ a^2 \right)$$

$$= 0.16 \ a^2$$

$$= \frac{16}{100} a^2$$

$$= \left( \frac{4}{25} a^2 \right) \text{sq. unit}$$

\*\*\*\*\*\*\* END \*\*\*\*\*\*