1. If perimeter of circle is equal to that of a square, then the ratio of their areas is

(a) 22: 7 (b) 14: 11 (c) 7: 22 (d) 11:14

2. Area of a square that can be inscribed in a circle of radius $8.0\,cm$ is

(a) 256 (b) 128 (c) $64\sqrt{2}\,cm^2$ (d) $64\,cm^2$.

3. The radius of circle whose circumference is equal to the sum of the circumference of the two circles of diameter $36\,cm$ and $20\,cm$ is

(a) $56.0\,cm$ (b) $42.0\,cm$ (c) $28.0\,m$ (d) $16.0\,cm$

4. Area of a sector of a circle with radius r and angle with degree measure θ is :

(a) $\frac{\theta}{180^\circ}\times\pi r^2$ (b) $\frac{\theta}{360^\circ}\times 2\pi r^2$ (c) $\frac{\theta}{360^\circ}\times\pi r^2$ (d) $\frac{\theta}{360^\circ}\times 3\pi r^2$

5. The length of the minute hand of a clock is $14\,cm$. The area swept out by the minute hand in 1 hour is :

(a) $016\,cm^2$ (b) $103\,cm^2$ (c) $154\,cm^2$ (d) $308\,cm^2$

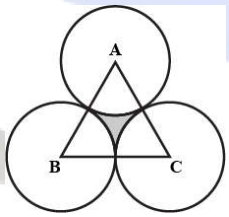
6. The circumference of a circle is $22\,cm$. The area of its quadrant (in cm^2) is :

(a) $\frac{77}{2}$ (b) $\frac{77}{4}$ (c) $\frac{77}{8}$ (d) $\frac{77}{16}$

7. The outer and inner diameters of a circular ring are $34\,cm$ and $32\,cm$ respectively, then the area of the ring is:

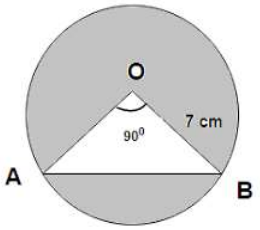
(a) 66π (b) 60π (c) 33π (d) 29π

8. In figure, if radius of each circle is unity and A B Cis an equilateral triangle, then area of shaded region is :



(a) $\sqrt{3}-\frac{\pi}{4}$ (b) $\frac{\sqrt{3}}{2}-\frac{\pi}{2}$ (c) $\sqrt{3}-\frac{\pi}{2}$ (d) $\pi-\frac{\sqrt{3}}{4}$

9. In figure, if radius of circle is $7\,cm$ and $\angle AOB = 90^\circ$, then area of shaded region is:



(a) $125\,cm^2$ (b) $152\,cm^2$ (c) $132\,cm^2$ (d) $129.5\,cm^2$

10. Area of the largest triangle that can be inscribed in a semicircle of radius r units is :

(a) r^2 sq. units (b) $\frac{1}{2}r^2$ sq. units (c) $2r^2$ sq. units (d) $\sqrt{2}r^2$ sq. units