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Paper prepared by
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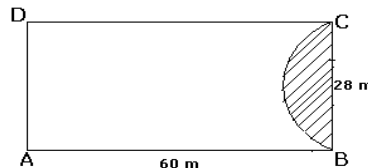**Teacher St. Joseph's Convent School Bathinda**
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Section A MCQ – 1 Mark Each

Q.1   If the circumference of a circle is 132m, then its area in square meters is

(a) 5986 m^2 (b) 2464 m^2 (c) 7952 m^2 (d) 1386 m^2

Q.2   The diameter of a wheel is 2.1 m . How far will it travel in 1000 revolutions?

(a) 2670 m   (b) 6600 m   (c) 1100 m   (d) 8800 m

Q.3   The circumferences of two concentric circles forming a ring are 88 cm and 66 cm respectively. The width of the ring is

(a) 14 cm   (b) 7 cm   (c) 21 cm   (d) $\frac{7}{2}$ cm

Q.4   The area of a circle is 154cm^2 square cm. Its circumference is

(a) 5 cm   (b) 44 cm   (b) 22 cm   (d) 66 cm

Q.5   Radius of a circle is 1 m. If its diameter is increased by 100%, its area is increased by

(a) 150%   (b) 200%   (c) 250%   (d) 300%

Section B – 2 Mark Each

Q.6   What is the perimeterof a sector of angle 45^0 of a circle with radius 7cm ?

Q.7   A plot is in the form of a rectangle ABCD having semicircle on BC as shown in the figure. The semicircle portion is grassy while the remaining plot is without grass. Find the area of the plot without grass where AB = 60 m and BC = 28 m.
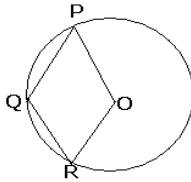
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Q.8   Find the area of a circle whose circumference is 22 cm.

Section B – 3 Mark Each

Q.9   In the given figure, OPQR is a rhombus, three of whose vertices lie on a circle with centre O. If the area of the rhombus is $32\sqrt{3}$ m^2 find the radius of the circle.

Q.10   In the figure ABC is a quadrant of a circle of radius 14 cm and a semicircle is drawn with BC as diameter. Find the area of the shaded region.
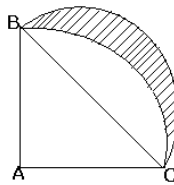
Section B – 4 Mark Each

Q.11   It is proposed to add to a square lawn, measuring 56 cm on a side, two circular ends. The centre of each circle being the point of intersection of the diagonals of the square. Find the area of the whole lawn.

Q.12   In a circle of radius 21 cm, an arc subtends an angle of 60° at the centre. Find

        (i) The length of the arc

        (ii) Area of the sector formed by the arc

        (iii) The area of the segment made by this arc.

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