NIOS/Acad./2021/211/20/E

National Institute of Open Schooling (NIOS)
Secondary Course
Lesson –20: Perimeters and Areas of Plane Figures
Worksheet – 20

1. The perimeter of a square is same as that of a rectangle with sides 15 m and 5m. Find the area and diagonal of the square.

2. The two parallel sides of a trapezium are 10 cm and 14 cm respectively and the distance between them is 8 cm. Find the area of the trapezium.

3. The Sides of a triangular park are 133 meter, 144 meter and 175 meter. Find the area of the park and total cost of painting for the park, if Rs.10 per square meter.

4. Using Heron's formula, find the area of an equilateral triangle whose side is 15 cm. Also find the altitude of the triangle.

5. There is a circular path of width 5 meter long along the boundary and inside a circular path of radius 15 meter. Find the cost of paving the path with bricks at the rate of Rs. 20 per square meter.

6. The radii of two circles are 9cm and 12cm. Find the radius of a circle whose area is equal to the sum of the areas of these two circles.

7. If the diameter of a circle is 42 cm, then find the perimeter of the sector of the circle sub-tending an angle of 60° at the centre.

8. Area of a circle is 616 cm^2. Find the perimeter of a sector of the circle with central angle 90^o.

9. Area of a rhombus is 64 cm^2. If one of the diagonals of the rhombus is 8cm, then find the other diagonal and the side of the rhombus.

10. Circumference of a circle exceeds the diameter by 30cm. Find the area of the circle.