

## IX Class

### EXERCISE - 5 to 7

#### I. ONE mark questions :

1. Find the area of circle if its circumference is 22 cm.
2. Find the perimeter of a semicircle if its radius is 2.1 cm.
3. The radius of a circular field is 77m. A path of width 7m is laid out side around it. Find its area.
4. The radii of a ring are 5 cm and 3 cm then find its area.
5. The angle of a sector is  $72^{\circ}$  and its radius is 14 cm. Find its length of arc.
6. The radius of a sector is 14 cm and its angle is  $135^{\circ}$ . Find its area.
7. What is the area of a sector whose radius is 28 cm and its length is 132 cm.?
8. The perimeter of a sector is 56 cm and its length is 32 cm. Find its radius.

#### II. Choose the correct answer :

9. Area of the circle whose diameter is d [     ]  
a)  $\frac{\pi d^2}{4}$                       b)  $\pi r^2$                       c)  $\frac{\pi r^2}{2}$                       d)  $\frac{d^2}{4}$
10. Angle in semicircle is [     ]  
a)  $30^{\circ}$                       b)  $60^{\circ}$                       c)  $90^{\circ}$                       d)  $180^{\circ}$
11. Circumference of a circle whose diameter is 7 cm is [     ]  
a) 44 cm                      b) 147 cm                      c) 14 cm                      d) 22 cm
12. The circumference of a semi circle is 154cm, then its radius is [     ]  
a) 24.5cm      b)49cm      c) 44cm      d)None
13. The radius of a ring are 'p' cm and 'q' cm then its width [     ]  
a) p +q      b)p – q      c) pq      d)p/q
14. The ratio between radius and diameter of a circle is [     ]  
a) 2: 1      b) 1: 2      c)3 : 2      d) None
15. The diameter of circle is equal to the side of a square then the ratio of their areas is [     ]  
a)  $\pi : 4$                       b)  $4 : \pi$                       c)  $22 : 7$                       d)  $7 : 22$
16. The perimeter of a semicircle of radius 'r' is [     ]  
a)  $\pi d$                       b)  $\frac{22}{7}r$                       c)  $\frac{36}{7}r$                       d)None

17. Area of sector whose radius is  $x$  and length is  $y$  [     ]

- a)  $\frac{1}{2} x^2 y$                       b)  $\frac{1}{2} x y$                       c)  $\frac{1}{2} (x + y)$                       d)  $2(x + y)$

18. The angle of a sector with its area  $\frac{1}{5}$  of area of circle is [     ]

- a)  $120^\circ$                       b)  $180^\circ$                       c)  $270^\circ$                       d)  $72^\circ$

**III. Fill in the blanks:**

19. Angle at the centre of the semicircle is \_\_\_\_\_

20. The longest chord of a circle is \_\_\_\_\_

21. Radius of the bigger circle of a ring is equal to \_\_\_\_\_

22. The area of ring is \_\_\_\_\_

23. Perimeter of a semi circle of radius 'r' cm is \_\_\_\_\_

24. The perimeter of a semi circle is 144cm, then its radius is \_\_\_\_\_

25. The area of semi circle of radius 35 cm \_\_\_\_\_

26. Area of sector if its length is 14cm and radius is 10 cm is \_\_\_\_\_

27. The area of a sector of radius 'r' is A then its length  $l =$  \_\_\_\_\_

28. The angle made by a sector is  $270^\circ$  then the area occupied by the sector in circle is \_\_\_\_\_

**IV. Match the following :**

**Group- A**

**Group – B**

29. Area of sector [     ] (A)  $l + 2r$

30. Area of ring [     ] (B)  $\frac{36}{7} r$

31. Length of the sector [     ] (C)  $\frac{x^\circ}{360} \pi r^2$

32. Perimeter of semi circle [     ] (D)  $\pi (R - r)$

33. Perimeter of the sector [     ] (E)  $\pi(R + r) (R - r)$

(F)  $\frac{x^\circ}{360} 2\pi r$

(G)  $\frac{lr}{2}$