

SECTION – A

Questions 1 to 6 carry 1 mark each.

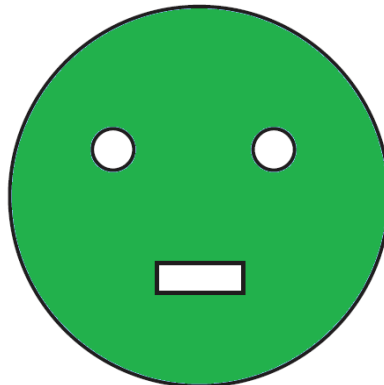
1. A rectangular wire of length 40 cm and breadth 20 cm is bent in the shape of a square. The side of the square is
(a) 10 cm (b) 20 cm (c) 30 cm (d) 40 cm
2. The diameter of a circle is 14 cm. Find its circumference
(a) 14 cm (b) 24 cm (c) 44 cm (d) 66 cm
3. When the circumference and area of a circle are numerically equal, what is the diameter numerically equal to?
(a) Area (b) Circumference (c) 271 (d) 4
4. The area of a circle is 2464m^2 , then the diameter is
(a) 56 m (b) 154 m (c) 176 m (d) none of these
5. A wire is bent to form a square of side 22 cm. If the wire is rebent to form a circle, its radius is
(a) 22 cm (b) 14 cm (c) 11 cm (d) 7 cm
6. Area of a rectangle and the area of a circle are equal. If the dimensions of the rectangle are $14\text{cm} \times 11\text{ cm}$, then radius of the circle is
(a) 21 cm (b) 10.5 cm (c) 14 cm (d) 7 cm.

SECTION – B(CCT Questions)

Questions 7 to 10 carry 1 mark each.

CCT Question

Anita is making face mask using green coloured card sheet for her Art project. From a circular card sheet of radius 14 cm, she removed two circles of radius 3.5 cm and a rectangle of length 3 cm and breadth 1cm. (as shown in the below figure).



Answer the following questions based on the above information:

7. Find the area of small two circles.
(a) 616 cm^2 (b) 3 cm^2 (c) 77 cm^2 (d) 536 cm^2

8. Find the area of big circle.
 (a) 616 cm^2 (b) 3 cm^2 (c) 77 cm^2 (d) 536 cm^2
9. Find the area of the remaining sheet.
 (a) 616 cm^2 (b) 80 cm^2 (c) 77 cm^2 (d) 536 cm^2
10. Find the area of the sheet removed.
 (a) 616 cm^2 (b) 80 cm^2 (c) 77 cm^2 (d) 536 cm^2

SECTION – C

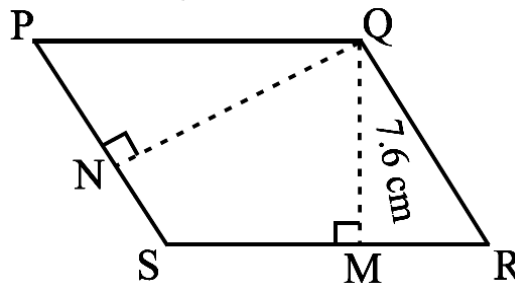
Questions 11 to 13 carry 2 marks each.

11. The base of a parallelogram is twice its height. If the area of the parallelogram is 512 cm^2 , find the base and height.
12. The ratio of the radii of two circles is 3: 2. What is the ratio of their circumferences?
13. If the area of a circle is 50.24 m^2 , find its circumference.

SECTION – D

Questions 14 to 17 carry 3 marks each.

14. The diameter of a wheel of a car is 63 cm. Find the distance travelled by the car during the period, the wheel makes 1000 revolutions.
15. The radius of a circle is 14 cm. Find the radius of the circle whose area is double of the area of the circle.
16. PQRS is a parallelogram (see below figure). QM is the height from Q to SR and QN is the height from Q to PS. If $SR = 12 \text{ cm}$ and $QM = 7.6 \text{ cm}$. Find:

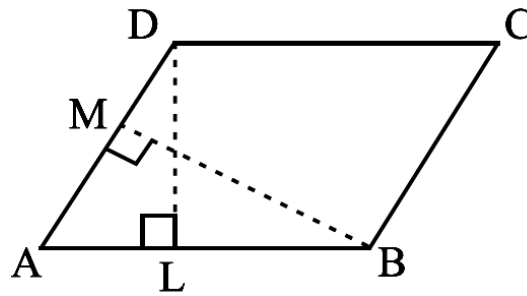


- (a) the area of the parallelogram PQRS
 (b) QN, if $PS = 8 \text{ cm}$
17. The area of a rhombus is 28 m^2 . If its perimeter be 28 m, find its altitude.

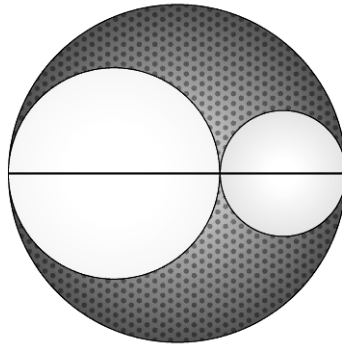
SECTION – E

Questions 18 to 20 carry 4 marks each.

18. DL and BM are the heights on sides AB and AD, respectively, of parallelogram ABCD (see below figure). If the area of the parallelogram is 1470 cm^2 , $AB = 35 \text{ cm}$ and $AD = 49 \text{ cm}$, find the length of BM and DL.



19. Two circles are drawn inside a big circle with diameters $\frac{2}{3}$ rd and $\frac{1}{3}$ rd of the diameter of the big circle as shown in below figure. Find the area of the shaded portion, if the length of the diameter of the circle is 18 cm.



20. Shazli took a wire of length 44 cm and bent it into the shape of a circle. Find the radius of that circle. Also, find its area. If the same wire is bent into the shape of a square, what will be the length of each of its sides? Which figure encloses more area, the circle or the square? (Take $\pi = \frac{22}{7}$)

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