

SECTION – A

Questions 1 to 6 carry 1 mark each.

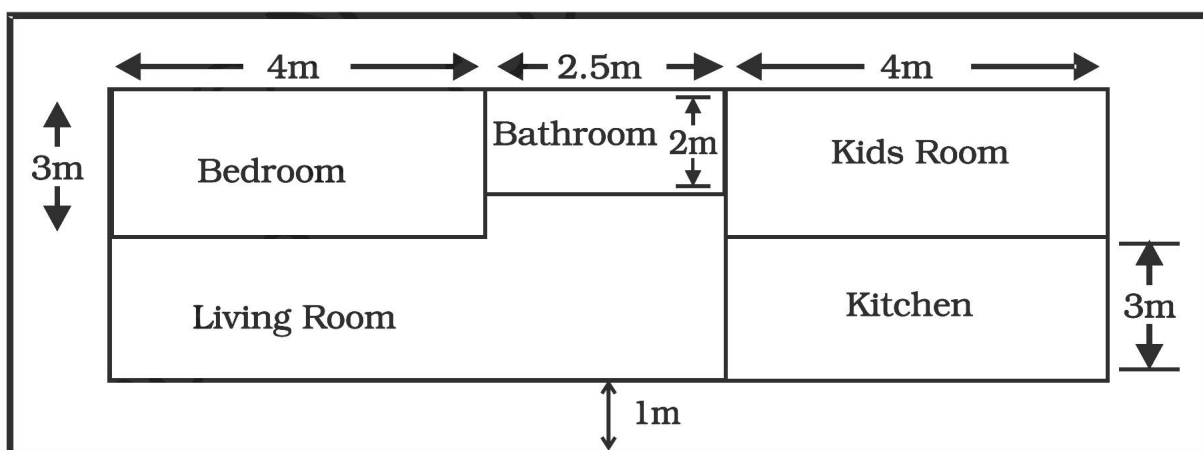
- The areas of two circles are in the ratio 49 : 36. The ratio of their circumferences is
 (a) 7 : 6 (b) 6 : 7 (c) 3 : 2 (d) 2 : 3
- The area of a circle is $9\pi \text{ cm}^2$. Its circumference is
 (a) $6\pi \text{ cm}$ (b) $36\pi \text{ cm}$ (c) $9\pi \text{ cm}$ (d) $36\pi^2 \text{ cm}$
- The area of a parallelogram is 100 cm^2 . If the base is 25 cm, then the corresponding height is
 (a) 4 cm (b) 6 cm (c) 10 cm (d) 5 cm
- The base of a parallelogram is twice of its height. If its area is 512 cm^2 , then the length of base is
 (a) 16 cm (b) 32 cm (c) 48 cm (d) 64 cm
- A circle is inscribed in a square of side 14 m. The ratio of the area of the circle and that of the square is
 (a) $\pi : 3$ (b) $\pi : 4$ (c) $\pi : 2$ (d) $\pi : 1$
- The minute hand of a clock is 14 cm long. How far does the tip of the minute hand move in 60 minutes?
 (a) 22 cm (b) 44 cm (c) 33 cm (d) 88 cm

SECTION – B(CCT Questions)

Questions 7 to 10 carry 1 mark each.

CCT Question

Mr. Kumar purchased a land for constructing independent house. He consulted with Architect to prepare the design for his independent house. The architect prepared the plan and measurement for his house as given below figure. The house is surrounded by a path 1m wide.



Answer the following questions based on the above information:

7. Find the Cost of paving the path with bricks at rate of Rs. 120 per m^2 .
 (a) Rs. 2440 (b) Rs. 3440 (c) Rs. 4440 (d) Rs. 5440
8. The area of living room is
 (a) $39 m^2$ (b) $27 m^2$ (c) $22 m^2$ (d) $12 m^2$
9. The area of house except bathroom is
 (a) $63 m^2$ (b) $58 m^2$ (c) $22 m^2$ (d) $27 m^2$
10. The Cost of wooden flooring inside the house except the bathroom at the cost of Rs. 1200 per m^2 is
 (a) Rs. 69600 (b) Rs. 69000 (c) Rs. 79000 (d) Rs. 79600

SECTION – C

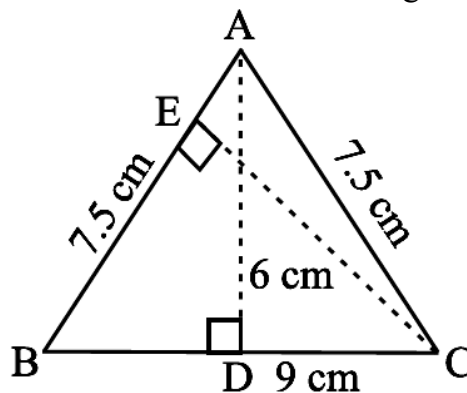
Questions 11 to 13 carry 2 marks each.

11. The circumference of a circle is 3.14 m, find its area.
12. Find the area of a right angled triangle whose sides containing the right angle are of lengths 20.8 m and 14.7 m.
13. One side of a parallelogram is 18 cm long and its area is $153 cm^2$. Find the distance of the given side from its opposite side.

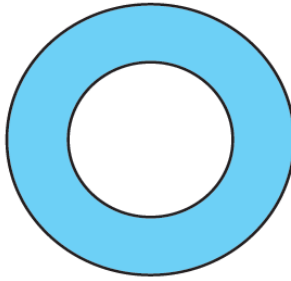
SECTION – D

Questions 14 to 17 carry 3 marks each.

14. Two sides of a parallelogram are 20 cm and 25 cm. If the altitude corresponding to the sides of length 25 cm is 10 cm, find the altitude corresponding to the other pair of sides.
15. The area of a triangle, whose base and the corresponding altitude are 15 cm and 7 cm, is equal to area of a right triangle whose one of the sides containing the right angle is 10.5 cm. Find the other side of this triangle.
16. $\triangle ABC$ is isosceles with $AB = AC = 7.5$ cm and $BC = 9$ cm (Fig 11.26). The height AD from A to BC is 6 cm. Find the area of $\triangle ABC$. What will be the height from C to AB , i.e., CE ?



17. A gardener wants to fence a circular garden of diameter 21m. Find the length of the rope he needs to purchase, if he makes 2 rounds of the fence. Also, find the cost of the rope, if it costs ₹ 4 per meter. (Take $\pi = 22/7$)



SECTION – E

Questions 18 to 20 carry 4 marks each.

- 18.** A wire of 5024 m length is in the form of a square. It is cut and made a circle. Find the ratio of the area of the square to that of the circle.
- 19.** A circular flower garden has an area of 314 m^2 . A sprinkler at the centre of the garden can cover an area that has a radius of 12 m. Will the sprinkler water the entire garden? (Take $\pi = 3.14$)
- 20.** A circular flower bed is surrounded by a path 4 m wide. The diameter of the flower bed is 66 m. What is the area of this path? ($\pi = 3.14$)
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