

General Instructions:

1. This question paper consists of **15 multiple-choice questions (MCQs)**.
2. Each question carries **1 mark**. The maximum marks for this test are **15**.
3. The total time allowed to complete this test is **20 minutes**.
4. All questions are compulsory.
5. Each question has **four options (A), (B), (C), and (D)**. Only one option is correct.
6. Students must choose the **most appropriate option** for each question.
7. No marks will be deducted for incorrect answers.
8. Calculators and other electronic devices are **not permitted**.
9. Rough work should be done neatly in the space provided (if any).
10. Read each question carefully before answering.

General Instructions:

1. This paper contains 15 Multiple Choice Questions (MCQs).
2. Each question carries 1 mark.
3. Use $\pi = \frac{22}{7}$ unless stated otherwise.

Q.1 A rectangular wire of length 40 cm and breadth 22 cm is reshaped into a square. What is the difference between the area of the rectangle and the area of the square?

- (a) 81 sq. cm
- (b) 80 sq. cm
- (c) 72 sq. cm
- (d) 64 sq. cm

Q.2 The ratio of the area of a square to that of the square drawn on its diagonal is:

- (a) 1 : 1
- (b) 1 : 2
- (c) 1 : 4
- (d) 1 : $\sqrt{2}$

Q.3 A path 2.5 m wide runs inside a rectangular park of length 40 m and breadth 30 m. Find the cost of leveling the path at Rs.15 per sq. m.

- (a) Rs.4,875

(b) Rs.5,250

(c) Rs.4,500

(d) Rs.4,925

Q.4 If the base of a parallelogram is doubled and its height is halved, what is the ratio of the area of the new parallelogram to the original one?

(a) 2 : 1

(b) 1 : 2

(c) 1 : 1

(d) 4 : 1

Q.5 The altitude of a triangle whose area is 42 sq. cm and base is 12 cm is:

(a) 7 cm

(b) 8 cm

(c) 10.5 cm

(d) 14 cm

Q.6 A circular wire of radius 42 cm is cut and bent into the form of a rectangle whose sides are in the ratio 6 : 5. The smaller side of the rectangle is:

(a) 60 cm

(b) 72 cm

(c) 66 cm

(d) 54 cm

Q.7 If the circumference of a circle is equal to the perimeter of a square of side 11 cm, find the area of the circle.

(a) 154 sq. cm

(b) 616 sq. cm

(c) 308 sq. cm

(d) 121 sq. cm

Q.8 Two cubes of side 4 cm each are joined end to end to form a cuboid. The surface area of the resulting cuboid is:

(a) 128 sq. cm

(b) 160 sq. cm

(c) 192 sq. cm

(d) 144 sq. cm

Q.9 How many bricks of size $25\text{ cm} \times 12.5\text{ cm} \times 7.5\text{ cm}$ will be required to build a wall 6 m long, 5 m high and 0.5 m thick?

(a) 6400

(b) 5600

(c) 4800

(d) 7200

Q.10 If the volume of a cube is 729 cubic cm, then its total surface area is:

(a) 486 sq. cm

(b) 324 sq. cm

(c) 512 sq. cm

(d) 243 sq. cm

Q.11 The area of a rhombus is 96 sq. cm. If one of its diagonals is 12 cm, find the perimeter of the rhombus.

(a) 32 cm

(b) 40 cm

(c) 48 cm

(d) 60 cm

Q.12 A wheel has a diameter of 84 cm. How many revolutions will it make to cover a distance of 792 meters?

(a) 200

(b) 250

(c) 300

(d) 350

Q.13 If the perimeter of a semi-circular protector is 36 cm, its diameter is:

(a) 14 cm

(b) 7 cm

(c) 21 cm

(d) 28 cm

Q.14 A cuboidal water tank is 6 m long, 5 m wide and 4.5 m deep. How many liters of water can it hold? ($1 \text{ m}^3 = 1000 \text{ liters}$)

(a) 135,000 liters

(b) 13,500 liters

(c) 1,350,000 liters

(d) 1350 liters

Q.15 The area of a square is increased by 44% when its side is increased by $k\%$. The value of k is:

(a) 20

(b) 22

(c) 25

(d) 44

— *End of Question Paper* —

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