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.

Chapter: Perimeter, Area, and Mensuration **Class:** 7
Test Code: 2026/Mensuration/VII/04
Max Marks: 15

General Instructions:

1. This paper contains 15 Multiple Choice Questions (MCQs).
2. All calculations must be shown in the rough work section.
3. Take $\pi = 3.14$ only if specifically mentioned; otherwise, use $\frac{22}{7}$.

Q.1 A rectangle has a perimeter of 48 cm. If its length is increased by 4 cm and breadth is decreased by 2 cm, the area remains the same. Find the original dimensions.

(a) 14 cm, 10 cm
(b) 16 cm, 8 cm
(c) 12 cm, 12 cm
(d) 18 cm, 6 cm

Q.2 The area of a square is x. If the side of the square is doubled, the new area is y. What is the ratio $x : y$?

(a) 1 : 2
(b) 1 : 4
(c) 2 : 1
(d) 4 : 1

Q.3 A parallelogram and a rectangle have the same base and the same area. The perimeter of the parallelogram is:

(a) Greater than the perimeter of the rectangle

(b) Less than the perimeter of the rectangle

(c) Equal to the perimeter of the rectangle

(d) Exactly double the perimeter of the rectangle

Q.4 Find the area of a right-angled triangle whose hypotenuse is 13 cm and one of its legs is 5 cm.

(a) 65 sq. cm

(b) 30 sq. cm

(c) 32.5 sq. cm

(d) 60 sq. cm

Q.5 The ratio of the radii of two circles is 3 : 5. Find the ratio of their areas.

(a) 3 : 5

(b) 6 : 10

(c) 9 : 25

(d) 27 : 125

Q.6 A path of uniform width 3 m runs around the outside of a square field of side 21 m. Find the area of the path.

(a) 288 sq. m

(b) 324 sq. m

(c) 189 sq. m

(d) 252 sq. m

Q.7 If the circumference of a circle is increased by 50%, by what percentage will the area increase?

(a) 50%

(b) 100%

(c) 125%

(d) 225%

Q.8 A cuboid has a volume of 960 cu. cm. Its length is 12 cm and breadth is 10 cm. Find its total surface area.

(a) 592 sq. cm

(b) 640 sq. cm

(c) 480 sq. cm

(d) 356 sq. cm

Q.9 The edges of a cube are doubled. How many times does its volume become?

(a) 2 times

(b) 4 times

(c) 6 times

(d) 8 times

Q.10 A wire in the form of a circle of radius 21 cm is bent into a square. Find the side of the square.

(a) 33 cm

(b) 44 cm

(c) 22 cm

(d) 66 cm

Q.11 A Godown is in the form of a cuboid of measures 60 m $\times$ 40 m $\times$ 30 m. How many cuboidal boxes can be stored in it if the volume of one box is 0.8 m^3?

(a) 90,000

(b) 80,000

(c) 72,000

(d) 60,000

Q.12 The area of a triangle is 150 sq. cm and the ratio of its base to its height is 3 : 4. Find its base.

(a) 15 cm

(b) 20 cm

(c) 10 cm

(d) 25 cm

Q.13 A horse is tethered to a corner of a square field of side 20 m by a rope 7 m long. Find the area of the part of the field in which the horse can graze.

(a) 154 sq. m

(b) 77 sq. m

(c) 38.5 sq. m

(d) 19.25 sq. m

Q.14 The surface area of a cube is 150 sq. cm. Its volume is:

(a) 125 cu. cm

(b) 150 cu. cm

(c) 225 cu. cm

(d) 100 cu. cm

Q.15 If the length, breadth, and height of a cuboid are in the ratio 1 : 2 : 3 and its total surface area is 88 sq. cm, find its volume.

(a) 48 cu. cm

(b) 24 cu. cm

(c) 12 cu. cm

(d) 36 cu. cm

— End of Question Paper —