Mathematics

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(Chapter – 10) (Mensuration) (Practice Test 2)

(Class VI)

Time: 1 Hour 15 Minutes **M. M: 25**

General Instructions:

- This question paper contains four sections: A, B, C and D. Each part is compulsory.
- Section A has 5 MCQ of one mark each.
- Section B has 3 questions of two marks each.
- Section C has 3 questions of three marks each.
- Section D has 2 questions of five marks each, attempt any 1 out of 2.
- There is no negative marking.

Section – A

1. The side of square is 6 cm. If its side is doubled, then its new perimeter is

(A)48 cm (B) 36 cm (C) 60 cm (D) 24 cm

2. A farmer has a rectangular field of length and breadth 240 m and 180 m respectively. He wants to fence it with 3 rounds of rope. What is the total length of rope he must use?

(A) 2700 m (B) 2520 m (C) 2400 m (D) none of these

3. Perimeter of a rectangle in meters with length 180 cm and breadth 50 cm is:

(A) 4.6 m (B) 4.7 m (C) 4.8 m (D) 4.2 m

4. Perimeter of a triangle having sides x, y, z is:

(A) xyz (B) x + yz (C) 2xyz (D) x + y + z

5. Perimeter of the figure is

(A) 34 cm (B) 32 cm (C) 35 cm (D) none of these

Section – B

6. State True and False. To find the cost of painting a wall we need to find the perimeter of the wall.

7. State True and False. to find the cost of a frame of a picture, we need to find the perimeter of the picture.

8. State True and False. An engineer who plans to build a compound wall on all sides of a house must find the area of the compound.

Section – C

9. Shikha runs around a square of side 75 m. Priya runs around rectangle with length 60 m and breadth 45 m. Who covers the smaller distance?

10. The perimeter of a rectangular pentagon is 100 cm. How long is each side?

11. Find the area of square whose side is

(A) 5 cm (B) 4.1 cm (C) 5.5 cm

Section – D

12. The area of each square on a chess board is 4sqcm. Find the area of the board.

(a) At the beginning of game when all the chess men are put on the board, write area of the squares left unoccupied.

(b) Find the area of the squares occupied by chess men.

13. (a) Find all the possible dimensions (in natural numbers) of a rectangle with a perimeter 36cm and find their areas.

(b) Find all the possible dimensions (in natural numbers) of a rectangle with an area of 36sqcm, and find their perimeters.

Answers

Section – A

1. 48 cm
2. 2520 m
3. 4.6 m
4. X + y + z
5. 34 cm

Section – B

6. No, in order to find the cost of painting a wall we need to find the area of the wall. So, given statement is false.
7. Yes, in order to find the cost of a r frame of a picture, we need to find the perimeter of the picture. So, the given statement is true.
8. No, an engineer who plans to build a compound wall on all sides of a house must not find the area of the compound. So, given statement is false.

Section-C

9. Distance covered by Shikha = Perimeter of the square = 4 × 75 m = 300 m.
Distance covered by Priya= Perimeter of the rectangle = 4 × (60 + 45) m = 210 m.
Thus, the distance covered by Priya is less than covered by Shikha.

10. Perimeter of regular pentagon = 5 × Side of the regular pentagon
Side of the regular pentagon = Perimeter/5 = 20 cm.

11. (A) Area of square = Side × Side
Area = 25 cm^2
(B) Area = 16.81 cm^2
(C) Area = 30.25 cm^2

Section – D

12. Area of chess board = 64 × 4 cm^2 = 256 cm^2
(a) Area of squares left unoccupied = 32 × area of one square
(b) Area occupied by chess men = 32× 4 = 128 cm^2

13. (a) Perimeter of rectangle = 36 cm
Length + breadth = 18 cm
Their corresponding areas are = 17 cm^2, 32 cm^2, 45 cm^2, 56 cm^2, 65 cm^2, 72 cm^2, 77 cm^2, 80 cm^2, 81 cm^2
(b)Length × breadth = 36 sq. cm.

Dimensions	Perimeter
1 cm × 36 cm	2(1+36) cm = 74 cm
2 cm × 18 cm	2(2+18) cm = 40 cm
3 cm × 12 cm	2(3+12) cm = 30 cm
4 cm × 9 cm	2(4+9) cm = 26 cm
6 cm × 6 cm	2(6+6) cm = 24 cm