

### Online Bank Exams Questions with Solutions Pdf

1. A rectangular farm has to be fenced on one long side, one short side and the diagonal. If the cost of fencing is Rs. 100 per m, the area of the farm is  $1200 \text{ m}^2$  and the short side is 30 m long, how long would the job cost?

- a. Rs. 7000
- b. Rs. 12000
- c. Rs. 14000
- d. Rs. 15000

Ans: B

$$\text{Length} = \left( \frac{1200}{30} \right) \text{m} = 40 \text{ m.}$$

$$\text{Diagonal} = \sqrt{(40)^2 + (30)^2} \text{ m} = 50 \text{ m.}$$

$$\text{Length to be fenced} = (40 + 30 + 50) \text{ m} = 120 \text{ m.}$$

$$\therefore \text{Cost of fencing} = ₹ (120 \times 100) = ₹ 12000.$$

2. The area of a square is three fifths the area of a rectangle. The length of the rectangle is 25 cm and its breadth is 10 cm less than its length. What is the perimeter of the square?

- a. 44 cm
- b. 60 cm
- c. 80 cm
- d. cannot be determined

Ans: B

$$\text{Length of rectangle} = 25 \text{ cm;}$$

$$\text{Breadth of rectangle} = 15 \text{ cm.}$$

$$\text{Area of rectangle} = (25 \times 15) \text{ cm}^2 = 375 \text{ cm}^2.$$

$$\therefore \text{Area of square} = \left(\frac{3}{5} \times 375\right) \text{ cm}^2 = 225 \text{ cm}^2 \quad \text{Side of square} \\ = \sqrt{225} \text{ cm} = 15 \text{ cm}.$$

$$\text{Perimeter of square} = (4 \times 15) \text{ cm} = 60 \text{ cm}.$$

3. A man walking at the speed of 4 kmph crosses a square field diagonally in 3 minutes. The area of the field is

- a.  $18000 \text{ m}^2$
- b.  $19000 \text{ m}^2$
- c.  $2000 \text{ m}^2$
- d.  $25000 \text{ m}^2$

Ans: C

$$\text{Speed of the man} = \left(4 \times \frac{5}{18}\right) \text{ m/s} = \frac{10}{9} \text{ m/s}.$$

$$\text{Time taken} = (3 \times 60) \text{ sec} = 180 \text{ sec}.$$

$$\text{Length of diagonal} = (\text{speed} \times \text{time}) = \left(\frac{10}{9} \times 180\right) \text{ m} = 200 \text{ m}.$$

$$\text{Area of the field} = \frac{1}{2} \times (\text{diagonal})^2 \\ = \left(\frac{1}{2} \times 200 \times 200\right) \text{ m}^2 = 20000 \text{ m}^2.$$

4. Total area of 64 small squares of a chessboard is 400 sq.cm. There is 3 cm wide border around the chess board. What is the length of the side of the chessboard?

- a. 17 cm
- b. 20 cm
- c. 23 cm
- d. 26 cm

Ans: D

$$\text{Area of each small square} = \left(\frac{400}{64}\right) \text{cm}^2 = 6.25 \text{cm}^2.$$

$$\text{Side of each small square} = \sqrt{6.25} \text{cm} = 2.5 \text{cm}.$$

Since there are 8 squares along each side of the chessboard, we have :

$$\text{Side} = [(8 \times 2.5) + 6] \text{cm} = 26 \text{cm}.$$

5. What percentage of the numbers from 1 to 50 have squares that end in the digit 1?

a. 1

b. 5

c. 10

d. 11

e. 20

Ans: D

The squares of numbers having 1 and 9 as the unit's digit end in the digit 1.

Such numbers are: 1, 9, 11, 19, 21, 29, 31, 39, 41, 49 i.e., there are 10 such numbers.

$$\therefore \text{Required percentage} = \left(\frac{10}{50} \times 100\right)\% = 20\%.$$

meritnotes.com