MENSURATION

AREA OF RECTANGLE AND SQUARE

EXERCISE

- **Q.1** One side of a rectangular field is 15 m and one of its diagonals is 17 m. Find the area of the field.
- **Q.2** A lawn is in the form of a rectangle having its sides in the ratio 2 : 3. the area of the lawn is $\frac{1}{6}$ hectares. Find the length and breadth of the lawn.
- **Q.3** Find the cost of carpeting a room 13 m long and 9 m broad with a carpet 75 cm wide at the rate of -12.40 per square meter.
- **Q.4** If the diagonal of a rectangle is 17 cm long and its perimeter is 46 cm, find the area of the rectangle.
- Q.5 The length of a rectangle is twice its breadth. If its length is decreased by 5 cm and breadth is increased by 5 cm, the area of the rectangle is increased by 75 sq. cm. Find the length of the rectangle.
- Q.6 In measuring the sides of a rectangle, one side is taken 5% in excess, and the other 4% in deficit. Find the error percent in the area calculated from these measurements.
- Q.7 A rectangular grassy plot 110 m by 65 m has a gravel path 2.5 m wide all round it on the inside. Find the cost of gravelling the path at 80 paise per sq. meter.
- Q.8 The perimeters of two squares are 40 cm and 32 cm. Find the perimeter of a third square whose area is equal to the difference of the areas of the two squares.

CLASS 8

- **Q.9** A room 5 m 55 cm long and 3m 74 cm broad is to be paved with square tiles. Find the least number of square tiles required to cover the floor.
- **Q.10** Find the area of a square, one of whose diagonals is 3.8 m long.
- **Q.11** The diagonals of two squares are in the ratio of 2 : 5. Find the ratio of their areas.
- **Q.12** If each side of a square is increased by 25%, find the percentage change in its area.

ANSWER KEY

- **1.** 120 m²
- **2.** 50 m.
- **3.** 1934.4
- **4.** 120 cm²
- **5.** 20 cm
- **6.** 0.8%
- **7.** 680
- **8.** 24 cm
- **9.** 176
- **10.** 7.22 m²
- **11.** 4 : 5
- **12.** 56.25%