



# ST. LAWRENCE HIGH SCHOOL



## TOPIC –Area & Perimeter

Subject : Mathematics

Class-9

F. M. 15

WORKSHEET NO.- 2

Second term

Date: 15.05.2021

### Q.1) Choose the correct option:

(1x15=15)

- i) The length of diagonal of square is  $12\sqrt{2}$  cm. The area of the square is  
a) 288 sq.cm      b)  $144\text{ m}^2$       c)  $72\text{ m}^2$       d)  $18\text{ m}^2$
- ii) If the area of square is  $A_1$  sq. units and the area of square drawn on the diagonal of that square is  $A_2$  sq. units, then the ratio of  $A_1 : A_2$  is  
a) 1 : 2      b) 2 : 1      c) 1 : 4      d) 4 : 1
- iii) If a rectangular place of which length and breadth are 6 mtr and 4 mtr is desired to pave it with 2 cm square tiles, then the number of tiles required is  
a) 1200      b) 2400      c) 600      d) 1800
- iv) If a square and a rectangle having the same perimeter and their areas are S and R respectively then  
a)  $S = R$       b)  $S > R$       c)  $S < R$       d) None of these
- v) If the length of diagonal of a rectangle is 10 cm, and area is 62.5 sq. cm, then the sum of their length and breadth is  
a) 12 cm      b) 15 cm      c) 20 cm      d) 25 cm
- vi) The numerical value of area and the height of an equilateral triangle are equal. The length of the side of the triangle is  
a)  $\sqrt{3}$  units      b) 2 units      c) 4 units      d)  $2\sqrt{3}$  units
- vii) If the length of the side of square is increased by 2 mt then its area increases by 28 sq.m. The length of the side of the square is  
a) 2 m      b) 4 m      c) 6 m      d) 8 m
- viii) The area, perimeter and diagonal of a square are x, y, z. The value of  $\frac{\sqrt{2}x}{yz}$  is  
a)  $1/2$       b)  $1/4$       c)  $1/8$       d)  $1/16$
- ix) The area of a rhombus is equal to the area of a square of side  $4\sqrt{6}$  cm. If the length of one diagonal of the rhombus be 16 cm, then the length of its side is  
a) 12 cm      b) 5 cm      c) 6 cm      d) 10 cm
- x) The area of an equilateral triangle of perimeter 6 cm is  
a) 3 sq. cm      b)  $2\sqrt{3}$  sq. cm      c)  $4\sqrt{3}$  sq. cm      d)  $9\sqrt{3}$  sq. cm
- xi) The length of the diagonal of a square plot is  $16\sqrt{2}$  m. The cost of fencing the plot at the rate of ₹15 per mtr is  
a) ₹ 240      b) ₹ 480      c) ₹ 60      d) ₹ 960
- xii) The ratio of the length and the breadth of a rectangular garden is 3 : 1. The cost of fencing the garden at the rate of ₹ 12 per meter is ₹ 1440. The length of the garden is  
a) 90 m      b) 75 m      c) 60 m      d) 45 m
- xiii) The length of equal sides of an isosceles triangle is 13 cm and the length of the base is 24 cm. Then the area of the triangle will be  
a) 60 sq. cm      b) 30 sq. cm      c) 20 sq. cm      d) 40 sq. cm
- xiv) In a right angled triangle the length of the base is 5 meters greater than half of the perpendicular and length of the hypotenuse is 9 meters greater than  $\frac{4}{5}$ th of the perpendicular. Then length of the perpendicular is  
a) 10 m      b) 20 m      c) 30 m      d) 40 m
- xv) The perimeter of an isosceles right angled triangle is  $(6\sqrt{2} + 1)$  cm. The area of the triangle is  
a) 3 sq. cm      b) 6 sq. cm      c) 9 sq. cm      d) 12 sq. cm

-ChaitaliRoy