TOPIC- Mensuration (Revision)

CLASS:9   **Sub: Mathematics**   **F. M. 15**

WORK SHEET NO. -19   **Date: 28.4.2020**

Q.1)   Choose the correct options: 1x15=15

i)   The ratio of the radius of a semi-circle and its inradius of a circle is
  a)2:1   b)3:2   c)4:3   d)1:1

ii)   The ratio of the area of the circumcircle and incircle of an equilateral triangle is
  a)5:4   b)1:4   c)4:1   d)4:5

iii)   The inner circumference of a circular ring is 88cm less than the outer circumference. The thickness of the ring will be
  a) 7cm   b) 14cm   c) 28cm   d) 42cm

iv) If the ratio of the circumference of two circles is 2:3,then the ratio of their areas will be
  a) 4:9   b) 2:9   c)9:4   d) 9:2

v) The inradius of a triangle of sides 9cm,12cm and 15cm will be .
  a) 2cm   b) 4cm   c)6cm   d)3cm

vi) The diameter of a circle is 21cm. What is the length of each side of an equilateral triangle whose perimeter is equal to the circumference of the circle?
  a) 24cm   b) 20cm   c) 25cm   d) 22cm

vii) The area of the circumcircle of an equilateral triangle is 462sqcm. What is the length of each side of the triangle?
  a)14cm   b)15cm   c)18cm   d)21cm

viii) Rita bought a ring which contains 269.5sqcm metal. If the outer diameter of the ring is 28cm, then the inner diameter of the ring will be
  a)15cm   b)20cm   c)21cm   d)25cm.

ix) The area of a circular field is 154sqm. The perimeter of the square covering the circular field will be
  a)45m   b)46m   c)55m   d)56m.

x) The time taken by Ram by running the circular field is 30sec less if he covers the field along the diameter with the same speed. If his speed is 90m/min then the area of the field is
  a)346.5sqm   b)364.5sqm   c)345.6sqm   d)354.5sqm

xi) The perimeter of a rhombus is 40m and the length of its one diagonal is 16m.The area of the rhombus is_____sqm.
  a)160   b)96   c)80   d)192

xii) If the perimeter of an equilateral triangle is24cm, then its height is
  a)4$\sqrt{3}$cm   b)4cm   c)3cm   d)3$\sqrt{2}$cm

xiii) If the length of each side of an equilateral triangle is 4cm then the length of its median will be_____cm.
  a)2   b)3   c)3$\sqrt{2}$ d)2$\sqrt{3}$

xiv) In a parallelogram the length of included sides are15m and 13m.If length of one diagonal is 14m then the area is_____sqm.
  a)150   b)168   c)186   d)196

xv) ABCD is a trapezium whose length of diagonal BD is 11cm and from A and C two perpendiculars of lengths 5cm and 11cm are drawn on the diagonal BD. The area of the ABCD is_____sqcm.
  a)44   b)34   c)66   d)88   Debjani Das