Chapter – 14

Practical geometry

Worksheet – 1

1. A ____ is a tool or devices to measure length of any object.
    a. Thread
    b. Rope
    c. Ruler
    d. Pencil
2. A ____ is a tool used to draw arcs and circles.
    a. Compass
    b. Rope
    c. Ruler
    d. Pencil
3. A ____ is a tool used to compare lengths.
    a. Compass
    b. Divider
    c. Ruler
    d. Pencil
4. _____ are a pair of devices used to construct perpendicular and parallel lines.
    a. Compass
    b. Divider
    c. Ruler
    d. Set Squares
5. _____ is a device to measure or draw angles.
    a. Compass
    b. Divider
    c. Ruler
    d. Protractor
6. A ____ is a shape in which every point on the boundary is at an equal distance from its centre.
    a. Triangle
    b. Rectangle
    c. Square

d. Circle
7. A line-segment is bounded by ___ end-points.
   a. 1
   b. 2
   c. 3
   d. 4
8. A bisector of an angle divides into ____ its value.
   a. Quarter
   b. Half
   c. Three-fourth
   d. Two-fifth
9. Match the column:

Column A	Column B	
a. Tangent	i.	Circles which have same center.
b. Concentric circles	ii.	a line passing only through a single point on the circumference of the circle.
c. Arc	iii.	Form square inside the circle.
d. Two diameters cut at 90°	iv.	A smooth small curve

10. State true or false:
    a. Two diameters intersecting at 90° make a square inside the circle.
    b. When two circles with same radius intersect each other they make a rhombus shape.
    c. Diagonal of a rectangle does not bisect the angles of its two vertices.
    d. One line segment can be divided into two rays.

11. Draw perpendicular bisector to a line segment using a compass?
12. Construct an angle of 45° using a compass and ruler?
13. AC is a straight line and B is their midpoint. Using a compass construct $\angle DBC = 90°$?
14. Construct $\overline{AC}$ of length 7.5 cm. From this cut off $\overline{AB}$ of length 5 cm. Measure $\overline{BC}$.
15. Draw any circle and mark points P, Q and R such that:

     a. A is on the circumference of the circle.

     b. B lies inside the circle.

     c. C lies outside the circle.

16. Draw a circle with diameter $\overline{AB}$ = 7 cm?

17. Draw a circle with radius 4.5 cm at centre P. Draw a chord TU anywhere in the circle and draw perpendicular bisector PV on it?

18. Draw an equilateral triangle ABC. Draw three perpendicular bisectors of AB, BC and CA and check whether all the three lines intersect each other at the same point or not?

19. Draw two concentric circles of length 3.5 cm and 6 cm?

20. $\overline{AB}$ and $\overline{CD}$ are two equal length line segments which intersect each other at 90°. Construct a circles whose circumference passes through all four points A, B, C, D.