**ASSIGNMENT (2020-21)**

**CLASS - X SUBJECT – MATHEMATICS**

**CH – 11 (CONSTRUCTION)**

1. Construct an isosceles triangle whose base is 9 cm and altitude is 8 cm. Then construct another triangle whose sides are  of the corresponding sides of the first isosceles triangle.
2. Draw a line segment AB of length 7 cm. Taking A as centre draw a circle of radius 3 cm and taking B as centre, draw another circle of radius 2.5 cm. Construct tangents to each circle from the centre of the other circle.
3. Construct a ΔABC in which BC = 6.5 cm, AB = 4.5 cm and ∠ABC = 60°. Construct a triangle similar to this triangle whose sides are  of the corresponding sides of the ΔABC.
4. Draw a right triangle in which sides (other than hypotenuse) are of lengths 8 cm and 6 cm. Then construct another triangle whose sides are  times the corresponding sides of the first triangle.
5. Construct a triangle with sides 4 cm, 5 cm and 7 cm. Then construct a triangle similar to it whose sides are  of the corresponding sides of the given triangle.
6. Construct a ΔABC in which AB = 6.5 cm, ∠B = 60° and BC = 5.5 cm. Also construct a triangle AB’C’ similar to ΔABC whose each side is  times the corresponding side of the ΔABC.
7. Draw a ΔABC with side BC = 6 cm, AB = 5 cm and ∠ABC = 60°. Construct ΔAB’C’ similar to ΔABC such that sides of ΔABC are  of the corresponding sides of ΔABC.
8. Construct a triangle whose perimeter is 13.5 cm and the ratio of the three sides is 2 : 3 : 4.
9. Draw a circle of diameter 6.4 cm. Then draw two tangents to the circle from a point P at a distance 6.4 cm from the centre of the circle.
10. Draw a circle of radius 3.4 cm. Draw two tangents to it inclined at an angle of 60° to each other:
11. Draw ΔABC in which AB = 3.8 cm, ∠B = 60° and median AD = 3.6 cm. Draw another triangle AB’C similar to the first such that 
12. Draw an equilateral triangle of height 3.6 cm. Draw another triangle similar to it such that its side is  of the side of the first.
13. Draw an isosceles ΔABC, in which AB = AC = 5.6 cm and ∠ABC = 60°. Draw another ΔAB’C’ similar to ΔABC such that 
14. Draw a circle of radius 3 cm. Take a point at a distance of 5 cm from the centre of the circle. Measure the length of each tangent.
15. Divide a line segment of length 6 cm internally in the ratio 3 : 2.