



## CONSTRUCTION

CLICK &amp; JOIN



## MATHS PRACTICE PAPER 05

Total Marks : 20

## I. Choose the Most Appropriate Answers

3 x 1 = 3

- To draw a pair of tangents to a circle which are inclined to each other at an angle of  $35^\circ$ . It is required to draw tangents at the end points of those two radii of the circle, the angle between which is
  - $105^\circ$
  - $70^\circ$
  - $140^\circ$
  - $145^\circ$
- To divide a line segment AB in the ratio 4 : 7, ray AX is drawn first such that  $\angle BAX$  is an acute angle and then points  $A_1, A_2, A_3, \dots$  are located at equal distances on the ray AX and the point B is joined to
  - $A_{12}$
  - $A_{11}$
  - $A_{10}$
  - $A_9$
- To divide a line segment AB in the ratio 5 : 7, first a ray AX is drawn so that  $\angle BAX$  is an acute angle and then at equal distances points are marked on the ray AX such that the minimum number of these points is
  - 8
  - 10
  - 11
  - 12

## II. Solve the following

2 x 1 = 2

- A pair of tangents can be constructed from a point P to a circle of radius 3.5 cm situated at a distance of How much maximum from the centre
- If the scale factor is  $\frac{3}{5}$ , then the new triangle constructed is \_\_\_\_\_ the given triangle.

## III. Solve the following

4 x 2 = 8

- Draw a line segment of length 7.6 cm and divide it in the ratio 5:8. Measure the two parts
- Construct a triangle of sides 4 cm, 5 cm and 6 cm and then a triangle similar to it whose sides are  $\frac{2}{3}$  of the corresponding sides of the first triangle
- Draw a line segment of length 6 cm. Using compasses and ruler, find a point P on it which divides it in the ratio 3 : 4.
- Draw a pair of tangents to a circle of radius 5 cm which are inclined to each other at an angle of  $60^\circ$

## IV. Solve the following

1 x 3 = 3

- Draw a triangle ABC in which  $AB = 5$  cm,  $BC = 6$  cm and  $\angle ABC = 60^\circ$ . Then construct a triangle whose sides are  $\frac{5}{7}$  times the corresponding sides of  $\triangle ABC$ .

## V. Solve the following

1 x 4 = 4

- Draw a line segment AB of length 8 cm. Taking A as centre, draw a circle of radius 4 cm and taking B as centre, draw another circle of radius 3 cm. Construct tangents to each circle from the centre of the other circle.