

Chapter: 4

Q.1 Choose the correct alternatives. (3)

- 1) The maximum number of tangents that can be drawn to a circle from a point out side it is
a. 2 b. 1 c. one and only one d. 0

- 2) $\triangle ABC \sim \triangle AQR$, $\frac{AB}{AQ} = \frac{7}{5}$ then which of the following option is true.

(a) A-Q-B (b) A-B-Q (c) A-C-B (d) A-R-B

- 3) If $\triangle ABC \sim \triangle PQR$ and $\frac{AB}{PQ} = \frac{7}{5}$, then

a. $\triangle ABC$ is bigger b. $\triangle PQR$ is bigger
c. Both triangles will be equal d. Cannot be decided

Q.2 Solve the following question. (Any Two) (4)

- 1) Construct $\triangle LMN$, such that $LM = 6.2$ cm, $MN = 4.9$ cm, $LN = 5.6$ cm.
- 2) Draw a circle of radius 2.7 cm. Draw a tangent to the circle at any point on it.
- 3) Draw a circle of radius 3.6. Draw a tangent to the circle at any point on it without using centre.

Q.3 Solve the following question. (Any Two) (6)

- 1) Draw a circle of diameter 6.4 cm. Take a point R at a distance equal to its diameter from the centre. Draw tangents from point R.
- 2) Draw a circle with centre O and radius 3.5 cm. Take point P at a distance 5.7 cm from the centre. Draw tangents to the circle from point P.
- 3) Draw a circle of radius 3.4 cm and centre E. Take a point F on the circle. Take another point A such that E - F - A and $FA = 4.1$ cm. Draw tangents to the circle from point A.

Q.4 Solve the following question. (Any One) (4)

- 1) Construct $\triangle PYQ$ such that, $PY = 6.3$ cm, $YQ = 7.2$ cm, $PQ = 5.8$ cm. If $\frac{YZ}{YQ} = \frac{6}{5}$, then construct $\triangle XYZ$ similar to $\triangle PYQ$.

2)

Draw a circle with centre P. Draw an minor arc AB of measure 100° . Draw tangents to the circle at points A and B.

Q.5 Solve the following question. (Any One)

(3)

- 1) Draw a circle with centre P and radius 3.1 cm. Draw a chord MN of length 3.8 cm. Draw tangents to the circle through points M and N.
- 2) Draw a circle having radius 3 cm Draw a chord $XY = 5$ cm, Draw tangents at point X and Y without using centre.

