

CHAPTER-7  
COORDINATE GEOMETRY

## EXERCISE - 7.1

In each of the following, write the correct answer:

1. Which of the following is not a criterion for congruence of triangles?
  - (a) SAS
  - (b) ASA
  - (c) SSA
  - (d) SSS
2. If  $AB=QR$ ,  $BC=PR$  and  $CA=PQ$ , then
  - (a)  $\triangle ABC \cong \triangle PQR$
  - (b)  $\triangle CBA \cong \triangle PRQ$
  - (c)  $\triangle BAC \cong \triangle RPQ$
  - (d)  $\triangle PQR \cong \triangle BCA$
3. In  $\triangle ABC$ ,  $AB=AC$  and  $\angle B=50^\circ$ . Then  $\angle C$  equal to
  - (a)  $40^\circ$
  - (b)  $50^\circ$
  - (c)  $80^\circ$
  - (d)  $130^\circ$
4. In  $\triangle ABC$ ,  $BC=AB$  and  $\angle B=80^\circ$ . Then  $\angle A$  is equal to
  - (a)  $80^\circ$
  - (b)  $40^\circ$
  - (c)  $50^\circ$
  - (d)  $100^\circ$
5. In  $\triangle PQR$ ,  $\angle R=\angle P$  and  $QR=4$  cm and  $PR=5$  cm. Then the length of  $PQ$  is

- (a) 4 cm
  - (b) 5 cm
  - (c) 2 cm
  - (d) 2.5 cm
6. D is a point on the side BC of a  $\triangle ABC$  such that AD bisects  $\angle BAC$ . Then
- (a)  $BD = CD$
  - (b)  $BA > BD$
  - (c)  $BD > BA$
  - (d)  $CD > CA$
7. It is given that  $\triangle ABC \cong \triangle FDE$  and  $AB=5$  cm,  $\angle B=40^\circ$  and  $\angle A=80^\circ$ . Then which of the following is true?
- (a)  $DF=5$  cm,  $\angle F=60^\circ$
  - (b)  $DF=5$  cm,  $\angle E=60^\circ$
  - (c)  $DE=5$  cm,  $\angle E=60^\circ$
  - (d)  $DE=5$  cm,  $\angle D=40^\circ$
8. Two sides of a triangle are of lengths 5 cm and 1.5 cm. The length of the third side of the triangle cannot be
- (a) 3.6 cm
  - (b) 4.1 cm
  - (c) 3.8 cm
  - (d) 3.4 cm
9. In  $\triangle PQR$ , if  $\angle R > \angle Q$ , then
- (a)  $QR > PR$
  - (b)  $PQ > PR$
  - (c)  $PQ < PR$
  - (d)  $QR < PR$

10. In triangles ABC and PQR , $AB=AC$ , $\angle C=\angle P$  and  $\angle B=\angle Q$ .The two triangles are
- (a) isosceles but not congruent
  - (b) isosceles and congruent
  - (c) congruent but not isosceles
  - (d) neither congruent nor isosceles
11. In triangles ABC and DEF, $AB=FD$  and  $\angle A=\angle D$ .The two triangles will be congruent by SAS axiom if
- (a)  $BC = EF$
  - (b)  $AC = DE$
  - (c)  $AC = EF$
  - (d)  $BC = DE$