

**Subject:** - Mathematics

## TEST PAPER

**CBSE-7<sup>th</sup>**

**Topic:** - Trinagles & Its Prop. & Congruence of Triangles

**Time:** - 60mins, M.M:-40

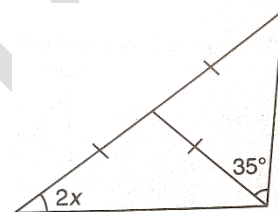
### (SECTION A – 1 MARK)

1. If two acute angles of right triangle are equal, then each acute angle is equal to: -

- a)  $30^\circ$       b)  $45^\circ$       c)  $60^\circ$       d)  $90^\circ$

2. In the given triangle, the value of  $x$  is: -

- a)  $55^\circ$       b)  $110^\circ$       c)  $70^\circ$       d)  $27.5^\circ$



3. A 26 m ladder is placed against the wall in such a way that the foot of the ladder is 10 cm away from the wall. How up on the wall is the upper end of the ladder?

- a) 20 m      b) 24 m      c) 18 m      d) 25 m

4. If  $\triangle ABC$  and  $\triangle XYZ$  are equilateral triangles and  $AB = XY$ . The condition under which  $\triangle ABC \cong \triangle XYZ$  is: -

- a) ASA      b) RHS      c) SSS      d) AAS

5. In a  $\triangle PQR$ ,  $\angle Q = 44^\circ$  and  $\angle P = 92^\circ$ . The pair of equal sides is: -

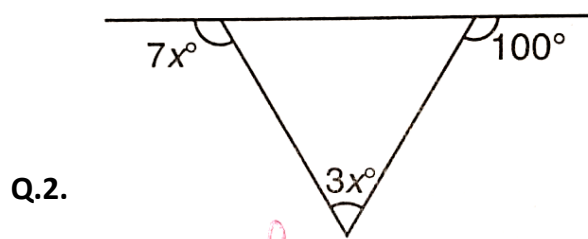
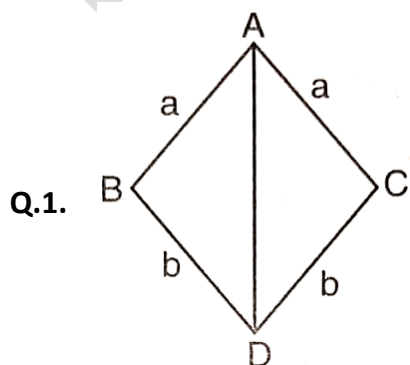
- a) PQ and PR      b) QR and PQ      c) QR and PR      d) None

### (SECTION B – 2 MARKS)

1. Prove that  $\triangle BAD \cong \triangle CAD$ .

2. Find the value of  $x$ .

3. One of the exterior angles of a triangle is  $130^\circ$  and the interior opposite angles are in the ratio 2 : 3. Find the angles of the triangles.

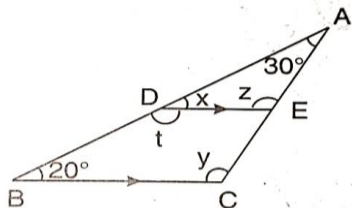


(SECTION C – 3 MARKS)

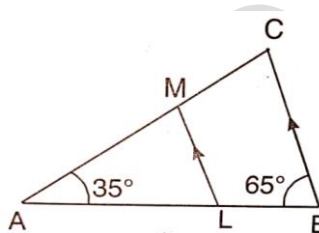
1. In the given figure,  $DE \parallel BC$ ,  $\angle B = 20^\circ$ , and  $\angle A = 30^\circ$ . Find the lettered angles.

2. In the given figure, find  $\angle AML$ .

Q.1.

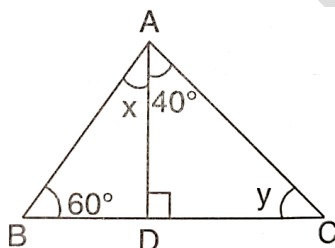


Q.2.



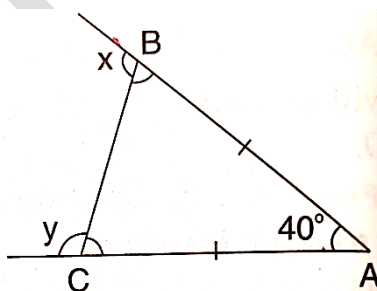
(SECTION D – 4 MARKS)

1. Find the lettered angles.



OR

In fig.  $\Delta ABC$  is isosceles with  $AB = AC$ . If  $\angle A = 40^\circ$ . What are the values of  $x$  and  $y$ ?



2. In a  $\Delta ABC$ , if  $3\angle A = 4\angle B = 6\angle C$ . Calculate the angles.

OR

In fig. measures of some angles are indicated. Find measures of  $\angle B$  and  $\angle C$ . Is  $\Delta ABC$  isosceles? If so, name the two sides that are equal.

