**CBSE Class 7 Mathematics/Congruence of Triangles** 

**Extra Questions for Practice/Model Questions** 

Choose the correct answer from the options given below:

1. If  $\triangle ABC \cong \triangle XYZ$ , AB = 4 cm, BC = 3 cm and AC = 5 cm. Find the length of YZ?

- A. 4 cm
- B. 3 cm
- C. 5 cm
- **2.** If  $\Delta PQR \cong \Delta ZXY$ , which of the following is false?
- A. PQ = ZX
- B. QR = XZ
- C. PR = ZY

3. In  $\triangle ABC$  and  $\triangle DEF$ ,  $\langle A = \langle D, \langle C = \langle F \rangle$  and AC = DF. Which congruence criterion used here?

- A. SSS Congruence Criterion
- **B. SAS Congruence Criterion**
- **C. ASA Congruence Criterion**
- 4. If  $\Delta XYZ \cong \Delta PQR$ , then XZ corresponds to ------
- A. PR
- B. QR
- C. PQ
- 5. If  $\triangle ABC \cong \triangle KLM$ , then < B corresponds to ------
- A. < K
- $\mathsf{B.} < L$
- **C**. < *M*

Answer the following:

6. Two equilateral triangles are always congruent. Say true or false. Give reasons.

7. Without drawing two triangles, write all six pairs of corresponding parts of the congruence relation  $\triangle ABC \cong \triangle PQR$ .

8. Measures of some parts of triangles PQR and YZX are given. Check whether they are congruent or not? If so write the congruence criterion.

< P = < Y

< Q = < Z

PQ = YZ

9. Given below are the measures of triangles. Check whether they are congruent or not? If so write the congruence criterion and write in symbolic form.

 $PQ \leftrightarrow ZY$ 

 $QR \leftrightarrow YX$ 

 $\mathsf{PR} \leftrightarrow ZX$ 

**10.**  $\triangle DEF$  and  $\triangle LMN$  are congruent. Write parts of  $\triangle DEF$  that correspond to  $\triangle LMN$ .

ANSWERS:

1. 3 cm

2. QR = XZ

- 3. ASA Congruence Criterion
- 4. PR

5. < *L* 

6. False.

All the three angles of an equilateral triangle is 60°.But with same angle measures we can draw different triangles. Their corresponding sides may not be same.

7. AB $\leftrightarrow$  PQ, BC $\leftrightarrow$  QR, AC  $\leftrightarrow$  PR

 $A \leftrightarrow P, B \leftrightarrow Q, C \leftrightarrow R$ 

8. Yes,  $\triangle PQR$  and  $\triangle YZX$  are congruent by ASA Congruence criterion.

9. Yes,  $\Delta PQR$  and  $\Delta ZYX$  are congruent by SSS Congruence criterion.

**10.**  $\triangle DEF \cong \triangle LMN$ 

 $\mathsf{DE} \leftrightarrow \textit{LM}, \mathsf{EF} \leftrightarrow \mathsf{MN}, \mathsf{DF} \leftrightarrow \mathsf{LN}$ 

< D  $\leftrightarrow$  <L,< E  $\leftrightarrow$  < M, < F  $\leftrightarrow$  <N