

## Short Answer Type Questions – I

[2 marks]

**Que 1. A triangle ABC can be constructed in which  $BC = 5$  cm,  $\angle C = 30^\circ$  and  $AC - AB = 3.8$  cm. State true or false and give reason.**

**Sol.** True, because  $AC - AB < BC$  or  $AC < AB + BC$ .

**Que 2. A triangle ABC can be constructed in which  $\angle B = 105^\circ$ ,  $\angle C 90^\circ$  and  $AB + BC + AC = 10$  cm. State true or false and give reason.**

**Sol.** False, because  $\angle B + \angle C = 105^\circ + 90^\circ = 195^\circ > 180^\circ$

**Que 3. A triangle ABC can be constructed in which  $\angle B = 60^\circ$ ,  $\angle C = 45^\circ$  and  $AB + BC + CA = 12$  cm. Write true or false and give reason for your answer.**

**Sol.** True, because  $\angle B + \angle C = 60^\circ + 45^\circ = 105^\circ < 180^\circ$ .