MM 20   **Constructions**   **Time 1h**

Section A 1 Marks Each

1.   Using a ruler and a pair of compasses, it is possible to construct an angle of

   (a) $40°$ (b) $35°$ (c) $47.5°$ (d) $37.5°$

2.   The construction of a $\triangle ABC$ in which AB=4cm, $\angle A = 60°$ is not possible when difference of BC and AC is equal to

   (a)   2.5 cm   (b) 3.6 cm   (c)   3 cm   (d) 5.5 cm

3.   The construction of a triangle ABC, given that BC=4.4 cm, $\angle C = 60°$ is possible when difference of AB and AC is equal to

   (a) 4.5 cm   (b) 5.1 cm   (c) 2.8 cm   (d) 4.9 cm

Section B 2 Marks Each

4.   A triangle ABC can be constructed in which $\angle B = 105°$, $\angle C = 90$ and AB + BC + AC = 10 cm. state true or false and give reason.

Section B 3 Marks Each

5.   Construct a triangle ABC in which BC=6.5 cm, $\angle B = 75°$ and AB + AC = 12.5 cm.

6.   Construct a triangle ABC in which BC = 7.5 cm, $\angle B = 45°$ and AB – AC = 3 cm.

MM 20   **Time 1h**

7. Construct a triangle PQR in which QR = 6 cm, $\angle Q = 60°$ and PR − PQ = 2.5 cm.

8. Construct a triangle XYZ in which $\angle Y = 30°$, $\angle Z = 90°$ and XY + YZ + ZX = 11.5 cm.

9. Construct an equilateral triangle if its altitude is 6 cm.