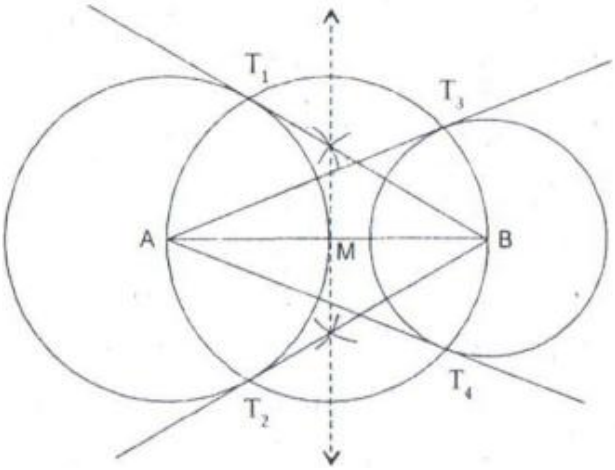
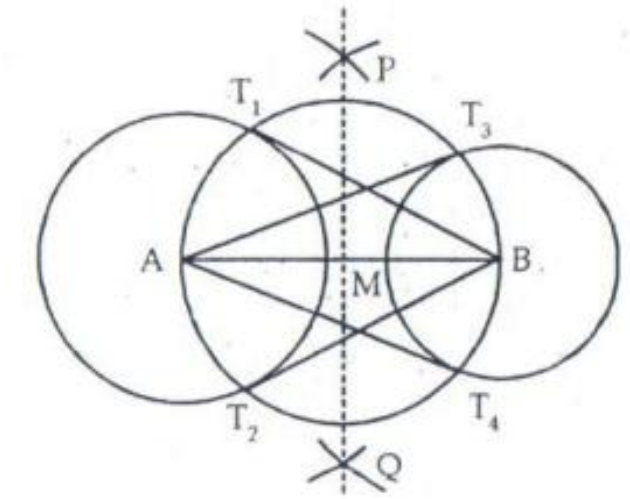
Exercise 13B

Question 5:



Steps of construction:
(i) A line segment AB = 8,5 cm is drawn.
(ii) Draw a right bisector of AB which meets AB at M.
(iii) With M as centre AM as radius a circle is drawn intersecting the given circles at T_1, T_2, T_3 and T_4
(iv) Join AT_3, AT_4 and BT_1, BT_2.
Thus AT_3, AT_4, BT_1, BT_2 are the required tangents.

Question 6:



Steps of construction:
(i) Draw a line segment AB = 7cm
(ii) Taking A as centre and radius 3 cm, a circle is drawn.
(iii) With centre B and radius 2.5 cm, another circle is drawn.
(iv) With centre A and radius more than 1/2 AB, arcs are drawn on both sides of AB.
(v) With centre B and the same radius, [as in step (iv)] arcs are drawn on both sides of AB intersecting previous arcs at P and Q.
(vi) Join PQ which meets AB at M.
(vii) With centre M and radius AM, a circle is drawn which intersects circle with centre A at T_1 and T_2 and the circle with centre B at T_3 and T_4

(viii) Join AT_3, AT_4, BT_1 and BT_2
Thus, AT_3, AT_4, BT_1, BT_2 are the required tangents.

********** END **********