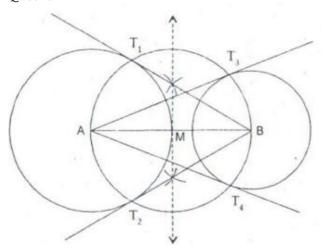


Exercise 13B

Question 5:

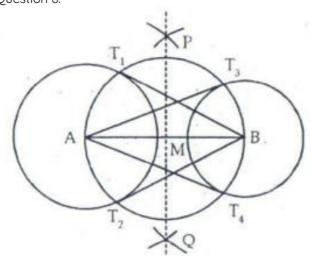


Steps of construction:

- (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 ${\rm AT_{3}}$, ${\rm AT_{4}}$, ${\rm BT_{1}}$, ${\rm BT_{2}}$ 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 $\rm T_1$ and $\rm T_2$ and the circle with centre B at $\rm T_3$ and $\rm T_4$

(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 *******