Marking Scheme: *Three questions carry 10 marks each. Questions have 2 subparts each. Subparts (a) and (b) carry 5 marks each.*

Question 1:

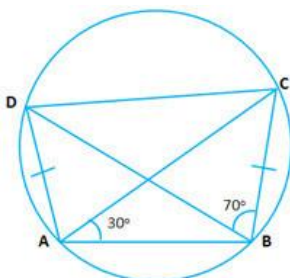a. Construct Δ BCP, where CB = 5 cm, BP = 4 cm, LPBC = 45º. Complete the rectangle ABCD such that
   (i) P is equidistant from AB and BC; and
   (ii) P is equidistant from C and D.
   (iii) Measure and write down the length of AB.

b. PQ is a chord of length 8 cm of a circle of radius 5 cm. The tangents at P and Q intersect at a point T. Find the length TP.
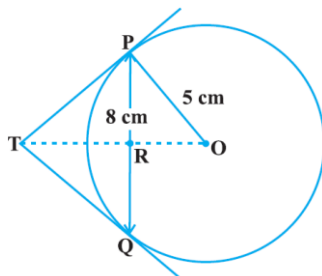

Question 2:

a. In the figure shown, $AD = BC, \angle BAC = 30^o$ and $\angle CBD = 70^o$. Find
   (i) $\angle BCD$
   (ii) $\angle BCA$
   (iii) $\angle ABC$
   (iv) $\angle ADB$

b. Using only a ruler and compasses, construct LABC = 120º, where AB = BC = 5 cm.
   (a) Mark two points D and E which satisfy the condition that they are equidistant from both BA and BC.
   (b) In the above figure, join AE and EC. Describe the figures: (i) ABCD (ii) ABD (iii) ABE.

Question 3:

a. In the given figure, $AB \parallel DC, \angle BCE = 80^o$ and $\angle BAC = 25^o$. Find
   (i) $\angle CAD$
   (ii) $\angle CBD$
   (iii) $\angle ADC$
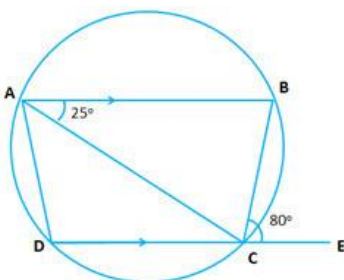
b. In the given figure PQ is the diameter of the circle whose center is O. Given $\angle ROS = 42^o$, calculate $\angle RTS$.