

2nd Unit TestStd: 9th EM

Topic: 1, 4, 6

Marks: 20

Subject: Geometry

Date:

Q 1. Solve the following. (Any 2)**02 Marks**

- The length of the longest chord of the circle with radius 2.9cm is - (Ch.6)
 - 3.5cm
 - 7 cm
 - 10 cm
 - 5.8 cm
- Draw seg AB = 6cm and bisect it. (Ch.4)
- Select the correct alternative from the answers of the questions given below :
 - How many mid points does a segment have?
 - only one
 - two
 - three
 - many

Q 2. Solve the following. (Any 2)**04 Marks**

- Construct $\triangle PQR$, in which $QR = 4.2\text{cm}$, $m\angle Q = 40^\circ$ and $PQ + PR = 8.5\text{cm}$. (Ch.4)
- Construct $\triangle DEF$ such that $DE = EF = 6\text{cm}$. $\angle F = 45^\circ$ and construct its circumcircle. (Ch.6)
- Construct $\triangle XYZ$, such that $YZ = 7.4\text{cm}$, $\angle XYZ = 45^\circ$ and $XY - XZ = 2.7\text{cm}$. (Ch.4)
- Point M is the midpoint of seg AB. If $AB = 8$ then find the length of AM.

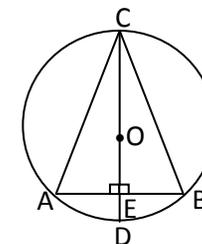
Q 3. Solve the following. (Any 2)**06 Marks**

- Construct $\triangle ABC$, such that $BC = 6\text{cm}$, $\angle ABC = 100^\circ$ and $AC - AB = 2.5\text{cm}$. (Ch.4)
- Distance of chord AB from the centre of circle is 8cm length of the chord AB is 12 cm. Find the diameter of circle. (Ch.6)
- Construct $\triangle ABC$ such that $\angle B = 100^\circ$, $BC = 6.4\text{ cm}$ $\angle C = 50^\circ$ construct its incircle. (Ch.6)
- Answer the following questions.
 - If $A - B - C$ and $d(A, C) = 17$, $d(B, C) = 6.5$ then $d(A, B) = ?$

Q 4. Solve the following. (Any 2)**08 Marks**

- Construct $\triangle PQR$, in which $\angle Q = 70^\circ$, $\angle R = 80^\circ$ and $PQ + QR + PR = 9.5\text{cm}$. (Ch.4)

- The perimeter of a triangle is 14.4cm and the ratio of lengths of its side is 2 : 3 : 4. Construct the triangle. (Ch.4)
- Prove that : A perpendicular drawn from centre of circle on its chord bisect the chord. (Ch.6)
- CD is a diameter of the circle with centre O. Diameter CD is perpendicular to chord AB at point E. Show that $\triangle ABC$ is an isosceles triangle. (Ch.6)



- Sketch proper figure and write the answers of the following questions?
 - If $A - B - C$ and $l(AC) = 11$, $l(BC) = 6.5$, then $l(AB) = ?$
 - If $X - Y - Z$ and $l(XZ) = 3\sqrt{7}$, $l(BC) = \sqrt{7}$, then $l(YZ) = ?$