**Roll No.** ☐☐☐☐☐☐☐☐☐☐☐☐          **Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Tech. (ECE) (Sem.–1)**
# ENGINEERING DRAWING
**Subject Code : ME-102**
**Paper ID : [A0125]**

**Time : 3 Hrs.**                                   **Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION - B & C. have FOUR questions each.**
3. **Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.**
4. **Select atleast TWO questions from SECTION - B & C.**

### SECTION-A

l.  **Answer briefly :**

(a) Draw the symbols of first and third angle of projection.

(b) Show by example use of size and location dimensioning.

(c) What do you mean by apparent length of line?

(d) Classify solids.

(e) Differentiate between frustum and cone with suitable example.

(f) Draw isometric scale.

(g) Write applications of development of surfaces.

(h) Draw any two types of lines and give their applications.

(i) Explain with suitable example unidirectional and aligned system of Dimensioning.

(j) What are auxiliary planes?

### SECTION-B

2. Construct a diagonal scale to show metres, decimetres and centimetres and long enough to measure upto 6 metres when 1 metre is represented by 2.5 cm. Find R.F and also indicate a distance of 4.56 m.
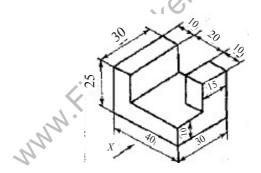
3.  A circular lamina of 60 mm diameter is resting on its base rim on HP, such that the lamina is inclined to H.P at 45° and is perpendicular to V.P. Draw its projections.

4.  Draw the projections of a right circular cone of base diameter 50 mm and axis height 60 mm resting on its one of the elements in H.P and the axis is parallel to V.P.

5.  A circular cone having base diameter 50 mm and 65mm height is resting on its base on HP. A section plane perpendicular to VP and inclined to HP at 45 degrees is bisecting its axis. Develop the lateral surface of the pyramid.


### SECTION-C

6.  Draw isometric views of a cylindrical block of 30mm diameter and 30mm thickness having a cube of 15mm side resting centrally on top of it.

7.  A vertical cylinder of 50 mm diameter and height 75 mm is resting on its base in HP. It is completely penetrated by another cylinder of same diameter and length. Their axes bisect each other at right angles and are parallel to VP. Draw the projections of the solids showing lines of intersection.

8.  A square pyramid of 35mm base edge and 65mm height, resting on its base on HP with its base edges equally inclined to VP. A section plane perpendicular to VP and inclined to HP at 35 degrees is bisecting its axis. Develop the lateral surface of the pyramid.

9.  Draw the front view (arrow side), right side view and top view of the given object.