## Assignment – I

## GEOMETRICAL CONSTRUCTIONS

- 1. Draw a horizontal and vertical line AB of 100 mm.
- 2. Draw an inclined line CD and EF of length 125 and 150 mm at an angle of 65° and -35° respectively.
- **3.** Draw a 120 mm long line GI inclined at 60° to the horizontal. Erect a perpendicular to GH of length 60 mm from point H, lying at a distance 30 mm from end G.
- 4. Draw a Circle of diameter 60 mm.
- 5. Draw a Rectangle of 70 \* 30 mm.
- **6.** Draw a hexagon of side 35 mm using Edge Method.
- 7. Draw a pentagon of 40 mm side using Inscribed in a Circle method.
- **8.** Draw a Triangle of 50 mm side using Circumscribe about Circle method.
- **9.** Draw the polygon of 3,4,5,6,7,8 sides with a common side of 30 mm.
- **10.**Draw a Square inscribed in a circle of radius 30 mm.
- **11.**Draw a hexagon circumscribed in a circle of diameter 70 mm.
- **12.**Draw an arc of 50 mm radius connecting two straight lines with an angle of 135°.
- **13.**Divide a line RS of 120 mm into seven equal parts.
- **14.**Divide a Circle of 100 mm diameter into 12 equal parts.
- **15.** Draw three parallel lines of length 100 mm at an angle of 35° to horizontal.
- **16.**Draw five concentric circles of 10 mm radius using offset.
- 17. Draw an ellipse with a major axis 120 mm and minor axis 60 mm.
- **18.**Write "MALLA REDDY UNIVERSITY" at an angle of 55° with 10 mm text height.
- **19.** Write " $ax^2+bx+c=0$ " with 15 mm Bold italic text.

## Note:

- Write Question in every sheet.
- Give proper dimensioning.