Name :
Roll No:

MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM – 686 666
(Government Aided Autonomous Institution)
DEPARTMENT OF MECHANICAL ENGINEERING
FIRST SESSIONAL EXAMINATION OCT 2025
S1 Mechanical A&B-Batch
B24ME1TO1 ENGINEERING GRAPHICS

Time – $1\frac{1}{2}$ Hours **Max: 40 Marks**

Answer All Questions

1. The front and top views of a straight line RS measures 55 mm and 70 mm, respectively. Point R is 10 mm above the HP and 20 mm in front of the VP. The top view of the line is inclined at 55 degree to the reference line. Determine the true length of line RS and its true inclinations with the reference planes. Also locate the traces. [CO1] 10 Marks

2. Distance between end projectors of a line AB is 65 mm. End A is 10 mm above HP and 30 mm in-front of VP. Its front view and top view makes an angle of 40 degree and 45 degree respectively with XY- line. Draw the projections, find true length and true inclinations with HP and VP and locate its traces. [CO1] 10 Marks

3. An equilateral triangular prism, side of base 30 mm and axis 60 mm is resting on HP on one of its side of base with axis parallel to VP and inclined at 30 degree to the HP. Draw the projections. [CO2] 10 Marks

4. A cone of base diameter 30 mm and height 50 mm lies on HP on one of its generators. Draw the projections of the cone when its axis in plan makes 45 degree with VP. [CO2] 10 Marks

VISION

Mentoring to Ensure Excellence

MISSION

- To facilitate comprehensive and integrated development of students by providing quality education that encourages sustainable practices
- To mould disciplined and socially committed engineers capable of assuming professional leadership upholding national integrity