

Reg No :

Name :

MAR ATHANASIOUS COLLEGE OF ENGINEERING, KOTHAMANGALAM

(Govt. Aided Autonomous Institution)

First Semester B.Tech. Degree (SAY) Examination, February 2026

Course Code: B24ES1T03B

Course Name: Computer Aided Engineering Graphics (B)

Max. Marks: 50

Duration: 2 Hours

*Instructions: Retain construction lines. Show necessary dimensions.***PART - 1****Answer all questions. Each question carries 12 marks.**

1. A line AB has its ends 15 mm and 50 mm below the HP. Length of its front view is 60 mm. The line is inclined at 25 degree to the HP. HT of the line is 10 mm behind of VP. Draw the projections; also find the true length and inclination with VP.
2. A square prism of side of base 50mm and altitude 80mm is placed such that the axis makes 40 degree with the HP and 40 degree with the VP in top view. Draw the projections of the prism when a base corner is resting on HP and two base edges containing the base corner is equally inclined to HP.
3. A square prism 30 mm base edge and axis 60 mm long rests on HP on its base such that all the base edges are equally inclined to VP. A section plane perpendicular to VP and inclined 45 degrees to HP passes through a point on the axis which is 15 mm away from the top base. Draw the sectional top view, front view and show the true shape of the section.

PART - 2**Answer any one full question. Each question carries 14 marks.**

4. Draw the projections of a pentagonal pyramid, side of base 25 mm and axis 60 mm long is lying on one of its triangular faces on HP with the base edge containing the triangular face making an angle of 45 degree with VP.
5. A cylinder of diameter 60mm and axis 70 mm long rests on HP on its base. A circular hole penetrates the cylinder in such a way that the axis of the hole is perpendicular to VP and bisects the axis of the cylinder. Draw the development of the lateral surface of the cylinder.
