

Reg No :

Name :

**MAR ATHANASIUS COLLEGE OF ENGINEERING, KOTHAMANGALAM**

(Govt. Aided Autonomous Institution)

Second Semester B.Tech. Degree Examination, May, 2026

Course Code: B24ES1T03A

Course Name: COMPUTER AIDED ENGINEERING GRAPHICS (A)

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 is inclined to HP and VP. The end projectors are separated by a distance of 50mm. End A is located on HP and 40mm in front of VP whereas end B is located on VP and 60mm above HP. Draw the projections and find its true length and true inclinations. Also mark the traces.
2. A square pyramid side of base 40mm and height 60mm is hung from one of its base corners. Draw its projections when in the plan the axis as a vertical plane inclined at 45 degree to VP.
3. A pentagonal pyramid, base 30 mm side and axis 60 mm long, has its base horizontal and an edge of the base parallel to the V.P. A section plane perpendicular to VP and inclined 45 degree to HP bisects the axis. Draw the development of the lateral surface of the pyramid.

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

4. A line PQ is inclined to HP and VP. The end P of the line is located 10mm above HP and 20mm in front of VP whereas end B is located 50mm above HP and 70mm in front of VP. The end projectors of the line are separated by a distance of 60mm. Draw the projections and find its true length and true inclinations. Also mark its traces.
5. A square pyramid of base edge 25mm and height 60mm is resting on HP on one of its base corner in such a way that its slant edge containing that corner is making 45 degree inclination with HP. If the axis is appearing to be inclined to VP by 30 degree, draw the projections.
