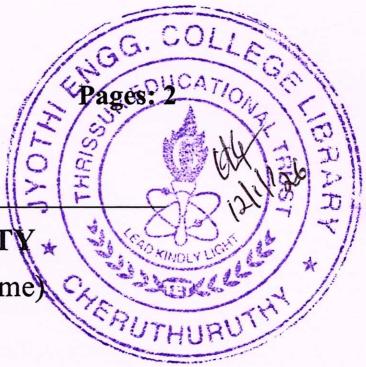


## APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY \*

B.Tech Degree S2 (S) Examination January 2026 (2024 Scheme)

**Course Code: GCEST203****Course Name: ENGINEERING GRAPHICS AND COMPUTER AIDED DRAWING**

Max. Marks: 60

Duration: 2 hours 30 minutes

**Instructions: Retain Construction lines. Show necessary dimensions. Answer any ONE question from each module. Each question carries 15 marks**

**MODULE 1**

SI		CO	Marks
1	Top View of a 75 mm long Line CD, measures 50 mm. End C is in HP and 50 mm in front of VP. End D is 15 mm in front of VP and it is above HP. Draw projections of CD and find angles with HP and VP.	CO 1	(15)
2	The top and front views of a line are inclined at $35^\circ$ and $45^\circ$ respectively to the xy line. One end of the line is on HP and VP while the other end is 40 mm below HP. Draw the projections of the line and find the true length and true inclinations of the line with HP and VP.	CO 1	(15)

**MODULE 2**

SI		CO	Marks
3	A tetrahedron of side 40 mm is resting on one of its base edges on the HP such that the base is inclined at $30^\circ$ to HP. Draw its projections if the base edge on which it rests is parallel to VP.	CO 2	(15)
4	A cone of 50 mm base diameter and 60 mm axis length rests on HP on one of its generators. Draw its projections when its axis is inclined to VP at $30^\circ$ .	CO 2	(15)

**MODULE 3**

SI		CO	Marks
5	A pentagonal pyramid, 30 mm edge of base and 60 mm height stands with its base on the ground and an edge of base perpendicular to VP. A section plane, perpendicular to HP and inclined at $30^\circ$ to VP cuts the pyramid at a shortest distance of 5 mm from the axis and in front of it. Draw the sectional views and true shape of the section.	CO 3	(15)

6 A cone of 55 mm base diameter and 75 mm height stands on its base on HP. It is truncated by a section plane, perpendicular to the VP, inclined at  $45^\circ$  to the HP and passing through the axis at a distance of 40 mm from the apex of the cone. Obtain the development of lateral surface of the truncated cone. CO 3 (15)

### MODULE 4

Sl		CO	Marks
7	Draw the isometric view of the frustum of a hexagonal pyramid, base 60 mm side, top 40 mm and height 30 mm, when one base edge is parallel to VP.	CO 4	(15)
8	Draw the isometric projection of a sphere 50 mm diameter, resting centrally on a cube of side 80 mm.	CO 4	(15)

