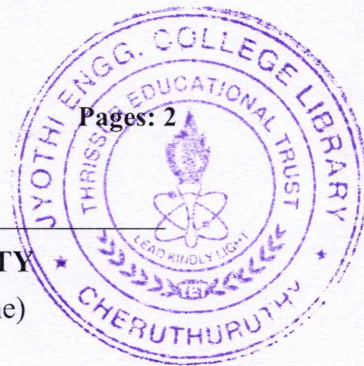


Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

B.Tech Degree S2 (R) Examination May 2025 (2024 Scheme)

**Course Code: GCEST203****Course Name: ENGINEERING GRAPHICS AND COMPUTER AIDED  
DRAWING****Max. Marks: 60****Duration: 2hours 30minutes****Instructions: Retain Construction lines. Show necessary dimensions. Answer  
any ONE question from each module. Each question carries 15 marks****MODULE 1**

SI No		CO	Marks
1	A line PQ 65mm long has its end P 10mm above HP and is in front of VP. The other end is 50mm in front of VP and is above HP. The front view is 50mm long and the top view makes $45^\circ$ with XY. Draw the projections and determine the true inclinations. Also measure top view and locate the traces.	CO1	(15)
2	The distance between end projectors of a line AB is 50mm. The end A lies 20mm above HP and 10mm behind VP. End B is 25mm below HP and 45mm behind VP. Draw its projections and determine the true length and true inclinations with HP and VP. Also locate the traces.	CO1	(15)

**MODULE 2**

SI No		CO	Marks
3	A hexagonal pyramid side of base 30mm and altitude 60mm is kept with a side of base parallel to VP and the triangular face containing that side of base being vertical. Draw the projections if the apex is nearer to VP.	CO2	(15)
4	A square prism of side of base 25mm and axis 50mm long is resting on an edge of base on VP such that the lateral face containing that	CO2	(15)



edge is inclined at  $30^\circ$  to VP. Draw the projections of the prism when the axis is inclined at  $40^\circ$  with HP.

### MODULE 3

SI No		CO	Marks
5	A cone of base radius 30 mm and generator 75 mm rests on its base on HP. It is cut by a plane inclined at $40^\circ$ to VP and perpendicular to HP and passes through the solid at a distance 10 mm away from axis and in front of it. Draw the sectional elevation and true shape of section.	CO3	(15)
6	A pentagonal prism of base side 30mm and axis 60mm is resting on one of its bases on ground with one rectangular face parallel to VP and the observer is nearer to it. It is cut by a plane perpendicular to VP and inclined at $40^\circ$ to axis and is passing through a point on axis 23mm from the top base. Develop the lateral surface of the remaining lower portion.	CO3	(15)

### MODULE 4

SI No		CO	Marks
7	A cylindrical rod of radius 30mm and axis 80mm lying on ground on its generator. A square hole of side 30mm is drilled axially throughout the rod. Draw the isometric projection of the hollow rod.	CO4	(15)
8	A rectangular slab of base 70mm x 50mm and thickness 30mm is placed on ground on its larger face with the shorter edge parallel to VP. A cone of base diameter 40mm and axis 50mm is placed centrally over the slab. Draw the isometric view of the solids.	CO4	(15)

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