Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – December 2025

Date: 17- 12- 2025 **Time:** 09:30am – 12:30pm

School: SOCSE	**Program:** B. Tech – Mechanical Engineering (Physics Cycle)	
Course Code: MEC1006	**Course Name:** Engineering Graphics	
Semester: I	**Max Marks**: 100	**Weightage**:50%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**
Marks	**-**	**45**	**35**	**20**

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer any one Question			**1Qx20M =20M**	
1a	Draw the Projections of the following Points on the same XY line, keeping convenient distance between each projector. Name the Quadrants in which they lie. A – 30mm above HP & 35 mm in front of VP B - 25 mm above HP & 30mm behind VP C- 30 mm above HP & on VP D - 30 mm below HP & 30 mm in front of VP.	**8 Marks**	**L3**	**CO1, CO2**
1b	A line CD measuring 75mm is inclined at an angle of 300 to HP and 450 to VP. The point C is 20mm above HP and 30mm in front of VP. Draw the projections of the straight line	**12 Marks**	**L3**	**CO3**
or				

2a	Draw the Projections of the following points on the same reference line, keeping the projectors 25mm apart. A -in HP and 20mm behind VP B -40mm above HP and 25 mm in front of the VP C -in the VP and 40mm above the HP D -25mm below the HP and 25mm behind VP	**8 Marks**	**L3**	**CO1, CO2**
2b	A Point "B" is 25 mm above HP, 30 mm in front of VP and 40mm from RPP. Draw its projections.	**12 Marks**	**L3**	**CO3**
	Part B **Answer any one question 1Qx45M =45M**			
3a	A pentagonal lamina of edges 30mm is resting on HP with one of its edges such that the plane surface makes an angle of 55° with HP. The edge makes an angle of 45° with VP and nearer to the observer, draw the top and front views of the lamina in this position.	**25 Marks**	**L3**	**C04**
3b	A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projection of the combination of solids.	**20 Marks**	**L3**	**C06**
	or			
4a	A hexagonal lamina of sides 25mm rests on one of its sides on HP. The lamina makes 45° to HP and the side on which it rests makes 30° to VP. Draw its projections.	**25 Marks**	**L3**	**C04**
4b	A hemisphere of 40 mm diameter is supported co-axially on the vertex of a cone of base dia 60mm and axis length 50 mm. The flat circular face of the hemisphere is facing upside. Draw the isometric projection of the combination of solids.	**20 Marks**	**L3**	**C06**
	Part C **Answer any one question 1Qx35M = 35M**			
5	A square prism, base 35mm side and height 60mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° to HP and appears to be inclined to VP 45°. Draw its projections.	**35 Marks**	**L3**	**CO5**
	or			
6	A regular square pyramid having 30mm base side and 60mm axis length rests on HP on one of its edges of the base. The axis is inclined to HP at 45° and the edge on which it rest is inclined to VP at 30°. Draw the projections.	**35 Marks**	**L3**	**CO5**

******* BEST WISHES *******