Roll No.

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – MAY 2025

Date: 24-05-2025   **Time:** 01:00 pm –04:00 pm

School: SOE/SOCSE	**Program:** B. Tech – Physics Cycle
Course Code: MEC1006	**Course Name:** Engineering Graphics
Semester: II	**Max Marks**: 100 **Weightage**:50%
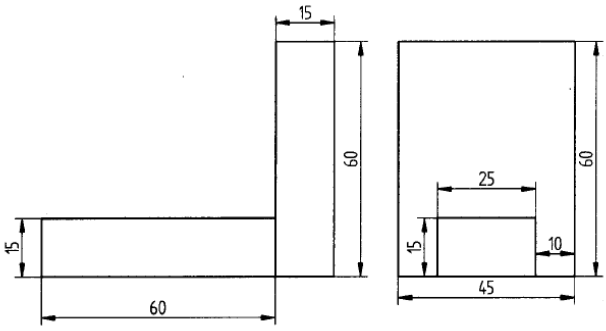
CO - Levels	CO1	CO2	CO3	CO4
Marks	-	45	35	20

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		20Mx1Q=20M		
1a	A point P is on HP and 25mm in front of VP. Another point Q is on VP and 35mm above HP. The distance between their projectors parallel to XY line is 55mm. Find the distance between their front and top views of the points P & Q.	8 Marks	L3	CO2
1b	A line AB has its end A 15 mm above the HP and 20 mm in front of the VP. The other end B is 60mm above the HP and 40mm in front of VP. The distance between end projectors is 50mm. Draw its projections. Determine the apparent lengths and true length and inclinations.	12 Marks	L3	CO2
or				

2a	Draw the Projections of the following points on the same reference line, keeping the projectors 25mm apart. Mention the quadrants in which they lie.
	    A -in HP and 20mm behind VP
	    B -40mm above HP and 25 mm in front of the VP
		8 Marks	L3	CO2

	C -in the VP and 40mm above the HP D -25mm below the HP and 25mm behind VP			
2b	A line PQ 80mm long has its ends P 10mm above the HP and 15mm in front of VP. The top view and front view of line PQ are 65mm and 70mm respectively.Draw its projections. Also determine the true and apparent inclinations of the line	**12 Marks**	**L3**	**CO2**

Part B
Answer any one question   45Mx1Q =45M

3a	A pentagonal lamina of edges 25mm is resting on HP with one of its edges such that the plane surface makes an angle of 60° with HP. The edge on which it rests makes an angle of 45° with VP. Draw the top and front views of the lamina in this position.	**25Marks**	**L3**	**C02**
3b	Following figure shows the front and side views of a solid. Draw isometric projection of the solid. 	**20Marks**	**L3**	**C04**

or

4a	A hexagonal lamina of sides 30 mm rests on its sides on HP. The lamina makes 45° to HP and the side on which it rests makes 30° to VP. Draw the projections of the lamina.	**25Marks**	**L3**	**C02**
4b	A square pyramid of sides of base 40 mm and height 60 mm is placed centrally on a rectangular slab of sides 60 mm x 80 mm and thickness 20 mm. Draw the isometric projection of the combination of solids.	**20Marks**	**L3**	**C04**

Part C
Answer any one question   35Mx1Q= 35M

5	A pentagonal pyramid 30mm sides of base and 55mm 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 pyramid when the axis is inclined to HP at 35° and appears to be inclined to VP at 45°.	**35Marks**	**L3**	**CO3**
6	A hexagonal pyramid 30 mm sides of base and 55 mm axis length rests on HP on one of its corner of the base such that two base edge containing the corner on which it rests makes equal inclinations with HP. Draw the projections of pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45°.	**35Marks**	**L3**	**CO3**

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