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# **PRESIDENCY UNIVERSITY**

## **BENGALURU**

## **End - Term Examinations - MAY 2025**

School: SOE/SOCSE	<b>Program:</b> B. Tech – Physics Cycl	le
Course Code: MEC1006	Course Name: Engineering Grap	phics
Semester: II	Max Marks: 100	Weightage:50%

CO - Levels	CO1	CO2	СО3	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

Ans	wer any one Question	20Mx	1Q=20N	M
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.  or	12 Marks	L3	CO2
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  Part B  Answer any one question  45Mx1Q = 45M  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 engle of 45° with VP. Draw the top and front views of the lamina in this position.  3b Following figure shows the front and side views of a solid. Draw isometric projection of the solid.  20Marks  L3  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.  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.	C02	L3	Marks M	D -25mm below the HP and 25mm behind VP  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  Part B	2b
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Part C			-		
Answer any one question 35Mx1Q= 35M				-	- 1
5 A pentagonal pyramid 30mm sides of base and 55mm axis length rests 35Marks L3	CO3	L3	35Marks		5
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°.	
33 and appears to be inclined to vr at 43.					6
	CO3	L3	35Marks	I i heragonal pyramia so min sides of base and so min axis length lests	
	CO3	L3	35Marks		
6 A hexagonal pyramid 30 mm sides of base and 55 mm axis length rests 35Marks L3	CO3	L3	35Marks	on HP on one of its corner of the base such that two base edge containing	
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