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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

February / March 2025 Semester End Main Examinations

Programme: B.E.

Semester: I / II

Branch: Common to all Branches

Duration: 3 hrs.

Course Code: 22ME1ESCED/22ME2ESCED/21ME1ESEVI/20ME1ESCED

Max Marks: 100

Course: Computer Aided Engineering Drawing

Instructions: 1. Answer any FOUR full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

			UNIT – I (Sketching)	CO	PO	Marks		
Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.	1	a)	A point is 30 mm in front of VP, 20 mm above HP and 25 mm in front of LPP. Draw its projections and name the side view.	CO1	PO2	05		
		b)	The top view of the line AB 80 mm long measures 65 mm. the midpoint of the line is 30mm in front of VP and 40 mm above HP. Draw its projections when one of the end points of the line touches VP. Find the true inclinations of the line.	CO1	PO2	15		
	OR							
		2	A hexagonal lamina of sides 25 mm rests on one of its corners on HP. The lamina makes 45 deg. to HP and the diagonal passing through the corner on which it rests is inclined at 30 deg. To VP. Draw its projections			CO1	PO2	20
	UNIT – II (Solid edge)							
	3	A pentagonal pyramid 25 mm sides of base and 60 mm axis length rests on HP on one of its edges of the base. Draw the projections of the pyramid when the axis is inclined to HP at 40° and VP at 30°.			CO2	PO2	30	
OR								
	4	A hexagonal pyramid 25mm sides of base and 50mm 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 of the pyramid inclined to HP at 40 deg and appears to be inclined to VP at 45 deg.			CO2	PO2	30	
UNIT – III (Solid edge)								
	5	A frustum of cone base diameter 50 mm, top diameter and height 50 mm is placed centrally on a cylindrical slab of diameter 100 mm and thickness 30 mm. draw the isometric projection of the combination.			CO3	PO3	30	
OR								

6		A hemisphere diameter 50 mm is resting on its curved surface centrally on the top face of frustum of a rectangular pyramid base 80 mm x 60mm and top 60mm x 40mm, height 55 mm. Generate the 3D view of the combination using solid edge software and FV, TV and Isometric views.	CO3	PO3 PO4	30
		UNIT – IV (Sketching)			
7		A square pyramid base 40mm side and axis 65 mm long has its base on HP and all the edges of the base are equally inclined to VP. It is cut with an inclined section plane so as the truncated surface is at 45 deg. to its axis bisecting it. Draw the development of the truncated pyramid.	CO4	PO2	20
		OR			
8		A hexagonal pyramid of sides 35 mm and altitude 65 mm is resting on HP on its base with two of the base sides perpendicular to VP. The pyramid is cut by a plane inclined at 30 deg. to HP and is intersecting the axis at 30mm above the base. Draw the development of the remaining portion of the pyramid	CO4	PO2	20
