

CBCS 2025- SCHEME

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1BCEDC/M/EC/E/S103

First Semester B.E Degree Examination, Dec.2025/Jan.2026

COMPUTER AIDED ENGINEERING DRAWING

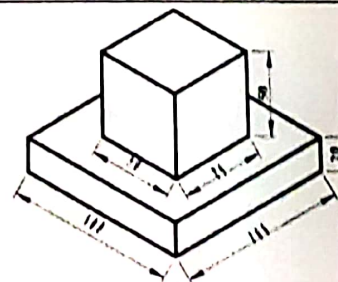
Time: 3 Hours

COMMON TO ALL BRANCHES

Max. Marks: 100

Note: i) Answer one full question from each Module, ii) Grid sheet may be provided for Sketching and
iii) CAD must be in A4 Sheet only

Q. No.	Module – I	Marks
1(a)	A point G is 25 mm below HP and situated in the third quadrant. Its shortest distance from the intersection of XY and XIY1 is 45 mm. Draw its projections and find its distance from VP.	10
1(b)	The front view of a 90 mm long line which is inclined at 45° to the XY line, measures 65 mm. End A is 15 mm above the XY line and is in VP. Draw the projections of the line and find its inclinations with HP and VP.	10
OR		
2	A pentagonal lamina of side 25 mm is placed on one of its corners on HP such that the surface makes an angle 30° with HP and perpendicular bisector of the edge passing through the corner on which the lamina rests appears to be inclined at 30° to VP. Draw the top and front views of the lamina.	20
Module – II		
3	A pentagonal prism 25 mm sides of base and 60 mm axis length rests on HP on one of its edges of the base which is inclined to VP at 30°. Draw the projections of the prism when the axis is inclined to HP at 40°.	30
OR		
4	A hexagonal pyramid 25 mm sides of base and 50 mm 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 is inclined to HP at 40° and to VP at 30°.	30
Module – III		
5	A rectangular prism of base size 25mm x 40mm and axis length 65mm is resting on HP on its base with the longer side of the base inclined at 30° to VP. It is cut by a plane inclined at 40° to HP and perpendicular to VP and passes through extreme left corner of base. Draw the development of the lateral surface of the remaining portion of the prism.	25
OR		
6	A square pyramid base 40mm side and axis 65mm long has its base on HP and all the edges of the base are equally inclined to VP. It is cut by an inclined section plane so as the truncated surface is at 45° to its axis, bisecting it. Draw the development of the truncated pyramid.	25
Module – IV		
7	A sphere of diameter 45 mm rests centrally over a frustum of cone of base diameter 60 mm, top diameter 40 mm and height 60 mm. Draw its isometric views.	25
OR		
8	Draw the top view, front view and side view of the following figure	25



Name & Signature of Examiner 1

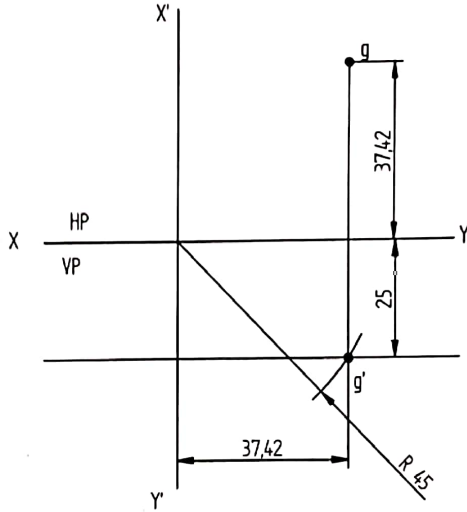
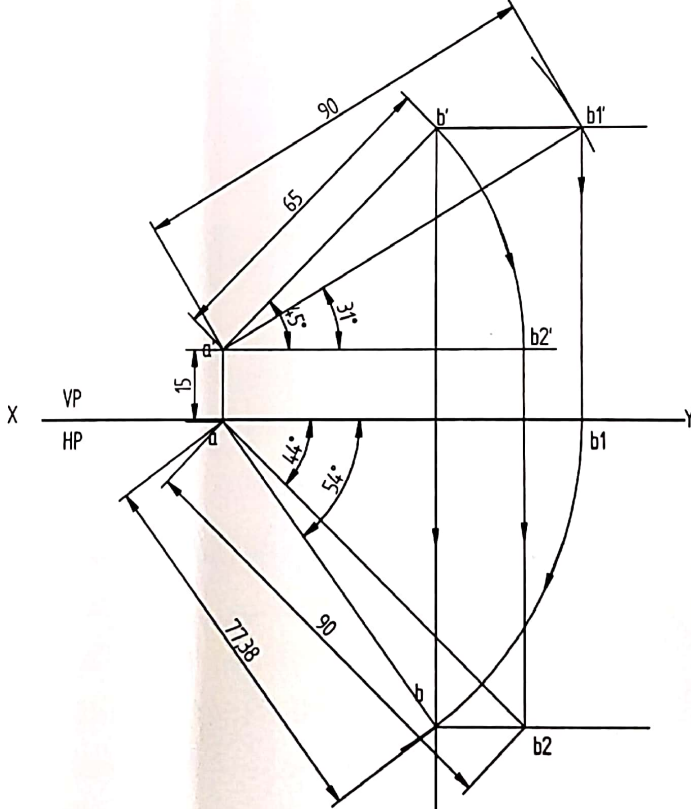
Name & Signature of Examiner 2



Department: Mechanical Engineering

Subject with Sub. Code: Computer Aided Engg Drawing (IBCEDEC103)

Name of Faculty: Prof. G.R.Sattigeri

Q.No.	Solution and Scheme	Marks
1a	 <p>Ans: The point G is 37.42 mm from VP</p>	10M
1b		10M

Q.No	Solution and Scheme	Marks
2	<p>Engineering drawing for Question 2 showing the projections of a pentagonal prism. The front view is a rectangle with height 25. The top view is a pentagon with vertices a, b, c, d, e. The drawing shows the object's position relative to the horizontal plane (HP) and vertical plane (VP) with a 30-degree inclination.</p>	20M
3	<p>Engineering drawing for Question 3 showing the projections of a rectangular prism. The front view is a rectangle with height 60. The top view is a rectangle with width 25. The drawing shows the object's position relative to the horizontal plane (HP) and vertical plane (VP) with a 40-degree inclination.</p>	30M

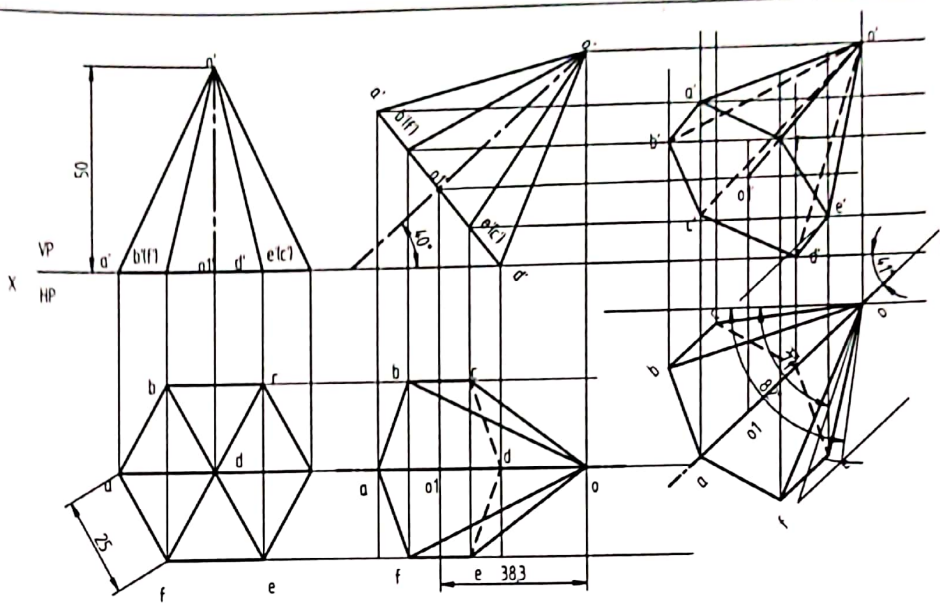
Q.No

Solution and Scheme

Marks

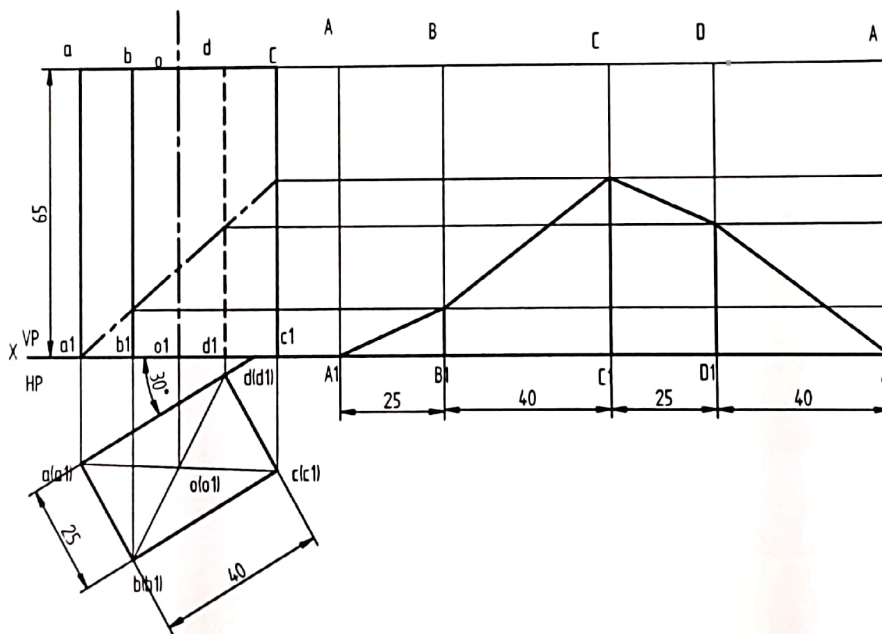
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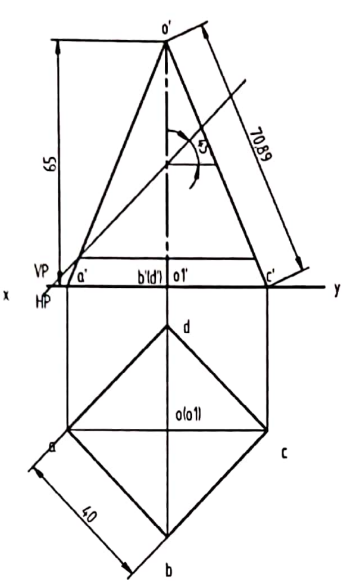
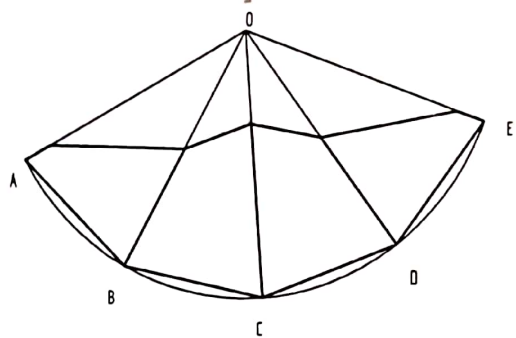
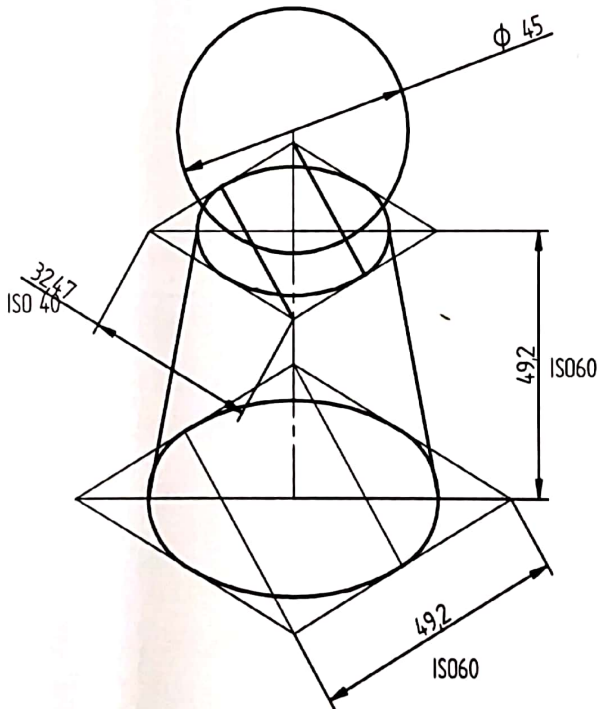
30M

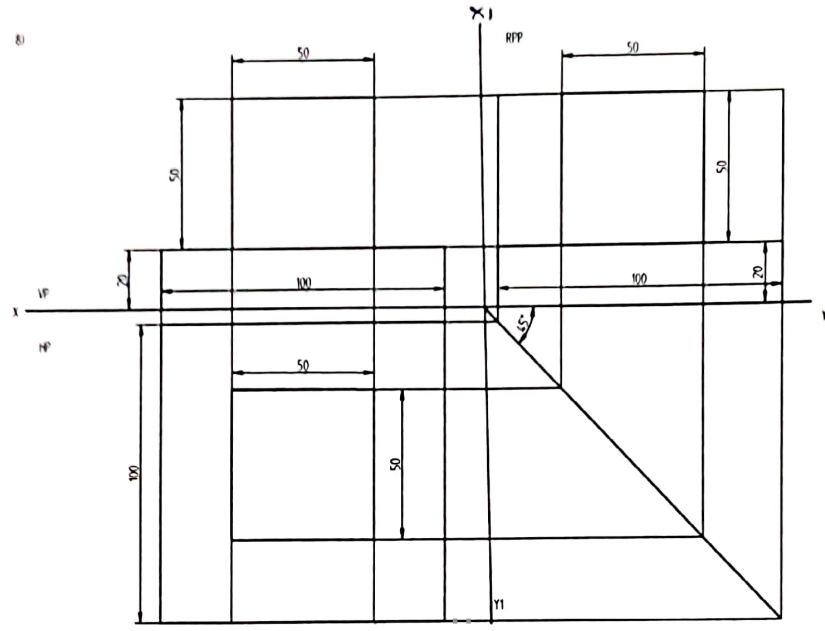


5

25M



Q.No	Solution and Scheme	Marks
6	 	25M
7		25M

Q.No	Solution and Scheme	Marks
8	 <p> <i>(Prof. G. R. Sattigeri)</i> Staff Incharge </p> <p> <i>(Prof. K. S. Pujari)</i> HOD Mechanical Engineering KLS Vishwanathrao Deshpande Institute of Technology Haliyal-581329 </p>	25M