

Code: 23ES1203

**I B.Tech - II Semester – Regular / Supplementary Examinations
MAY 2025**

**ENGINEERING GRAPHICS
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

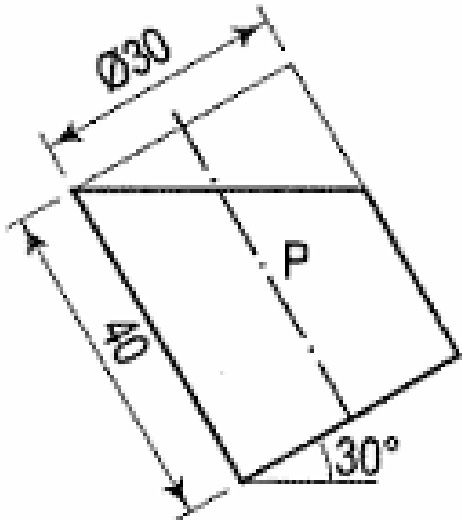
2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	The area of a field is 50,000 sq m. The length and the breadth of the field, on the map is 10 cm and 8 cm respectively. Construct a diagonal scale which can read up to one metre. Mark the length of 235 metre on the scale. What is the R.F. of the scale?		L3	CO1	14 M
OR					
2	A circle of 60 mm diameter rolls along a straight line without slipping. Draw the curve traced out by a point P on the circumference, for one complete revolution of the circle. Name the curve. Draw a tangent to the curve at a point on it 45 mm from the line.		L3	CO1	14 M

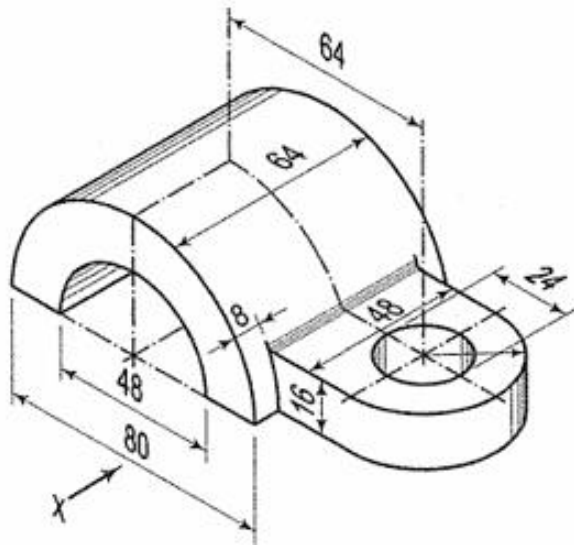
UNIT-II					
3	a)	Two points A and B are in the H.P. The point A is 40 mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 70 mm and the line joining their top views makes an angle of 45° with xy. Find the distance of the point B from the V.P.	L3	CO2	7 M
	b)	A point 40 mm above xy line is the plan-view of two points P and Q. The elevation of P is 50 mm above the H.P. while that of the point Q is 25 mm below the H.P. Draw the projections of the points and state their position with reference to the principal planes and the quadrant in which they lie.	L3	CO2	7 M
OR					
4		A line AB, 80 mm long is inclined at 30° to the H.P. Its end A is 15 mm above the H.P. and 25 mm in front of the V.P. Its front view measures 65 mm. Draw the top view of AB and determine its inclination with the V.P.	L3	CO2	14 M
UNIT-III					
5		Draw the projections of a regular hexagon of 25 mm side, having one of its sides in the H.P. and inclined at 60° to the V.P., and its surface making an angle of 45° with the H.P.	L3	CO2	14 M

OR				
6	A hexagonal pyramid, base 30 mm side and axis 55 mm long, has an edge of its base on the ground. Its axis is inclined at 30° to the ground and parallel to the V.P. Draw its projections.	L3	CO2	14 M
UNIT-IV				
7	A cube of 40 mm long edges is resting on the H.P. on one of its faces with a vertical face inclined at 30° to the V.P. It is cut by a section plane parallel to the V.P. and 12 mm away from the axis and further away from the V.P. Draw its sectional front view and the top view	L3	CO2	14 M
OR				
8	Draw the development of the lateral surface of the part P of the cylinder, the front view of which is shown in Fig. 	L3	CO3	14 M

UNIT-V

L3	CO4	14 M
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- i) Front view ii) Top view
- iii) Side view from the right



OR

L3	CO4	14 M
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- i) Front view ii) Top view
iii) Side view from the right.

