

Code: 23ES1203

I B.Tech - II Semester – Regular / Supplementary Examinations
JUNE 2026

ENGINEERING GRAPHICS
(Common for EEE, ECE)

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	A fixed point F is 75 mm from a fixed straight line. Draw the locus of a point P moving in such a way that its distance from the fixed straight line is twice its distance from the fixed point. Name the curve. Draw a normal and a tangent to the curve at a point on it, 50 mm from F .		L3	CO1	14 M
OR					
2	Construct a diagonal scale with R.F = 3/100 showing metres, decimetres and centimetres, and to measure up to 5 metres. Show the length of 3.69 metres on it.		L3	CO1	14 M

UNIT-II					
3	a)	A point P is 50 mm from both the reference planes. Draw its projections in all possible positions.	L3	CO2	7 M
	b)	Draw the projections of a point P; its top view is 40 mm above xy; the front view, 20 mm below the top view. Identify and state the quadrant in which the point P is situated.	L3	CO2	7 M
OR					
4	A line AB, 90 mm long, is inclined at 45° to the H.P. and its top view makes an angle of 60° with the V.P. The end A is in the H.P. and 12 mm in front of the V.P. Draw its front view and find its true inclination with the V.P.		L3	CO2	14 M
UNIT-III					
5	Draw the projections of a circle of 50 mm diameter resting in the H.P. on a point A on the circumference, its plane inclined at 45° to the H.P. and top view of the diameter AB making 30° angle with the V. P.		L3	CO2	14 M
OR					
6	Draw the projections of a hexagonal prism, base side 30 mm and axis 70 mm long, resting on H.P. with one of its base edges perpendicular to VP and axis inclined at 45° to H.P.		L3	CO2	14 M

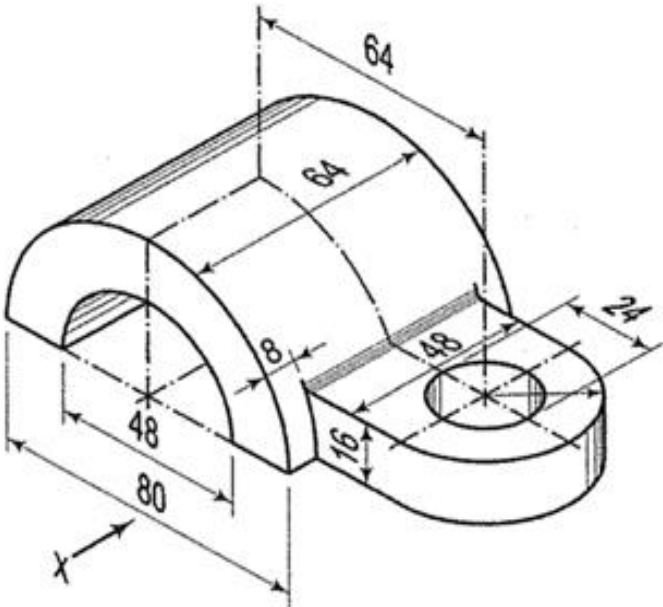
UNIT-IV

7	A cylinder of diameter 60 mm and height 80 mm rests on H.P. It is cut by a plane inclined at 45° to H.P. and perpendicular to V.P. passing through mid-height. Draw the sectional front view and sectional top view and obtain the true shape of section.	L3	CO2	14 M
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OR

8	A square prism of base side 40 mm and height 80 mm rests on H.P. Draw the development of its lateral surfaces.	L3	CO3	14 M
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UNIT-V

9	Draw the front view, top view and both side views of the given isometric figure. 	L3	CO4	14 M
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OR

