

Code: 23ES1203

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

**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.

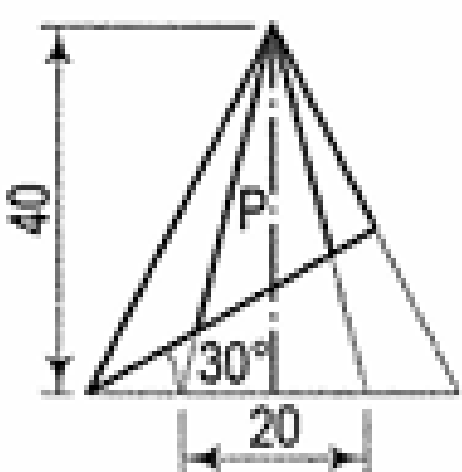
2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

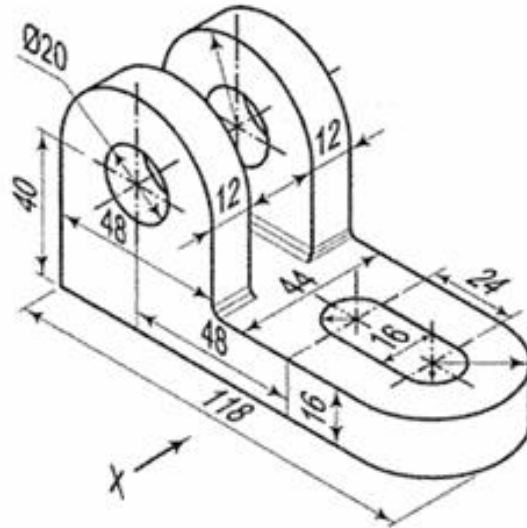
			BL	CO	Max. Marks
UNIT-I					
1	The Distance between Delhi and Agra is 200 km and its equivalent distance on map measures 10 cm. Construct a diagonal scale to indicate 223 km and 135 km.	L3	CO1	14 M	
OR					
2	A fixed point F is 8 cm from a fixed straight line. Draw the locus of a point P moving in such a way that its distance from the fixed straight line is equal to its distance from F. Name the curve and draw normal and tangent at a point 6 cm from F.	L3	CO1	14 M	

UNIT-II				
3	Mark the projections of the following points on a common reference line keeping the projectors 25 mm apart A 20 mm above HP and 30 mm in front of V.P B 25 mm above HP and 40 mm behind VP C 30 mm below HP and 45 mm behind VP D 30 mm below HP and 40 mm in front of VP E 25 mm above HP and in the VP F 35 mm below HP and in VP G 25 mm in front of VP and in HP	L3	CO2	14 M
OR				
4	The distance between the projectors of two points A and B is 60 mm. Point A is 10 mm above HP and 15 mm in front of VP. Point B is 50 mm above HP and 40 mm in front of VP. Find the shortest distance between A and B. Measure the true inclinations of the Line AB with HP and VP.	L3	CO2	14 M
UNIT-III				
5	A Hexagonal plane of 20 mm side rests on one of its corners on the HP. The diagonal passing through this corner is inclined at 45° to the HP. The plate then rotated through 90° such that the top view of this diagonal is perpendicular to the VP and surface is still inclined to HP.	L3	CO2	14 M

OR				
6	A pentagonal pyramid side of base 30 mm and axis 60 mm long rests with one of its corner on HP such that the base is inclined at an angle of 60^0 to HP and one side of base is perpendicular to VP. Draw its projections.	L3	CO2	14 M
UNIT-IV				
7	A square prism side of base 25 mm and axis 50 mm long rests with its base on HP and one of its rectangular faces is inclined at 30^0 to VP. A section plane perpendicular to VP and inclined at 60^0 to HP cuts the axis of the prism at a 20 mm from its top end.	L3	CO2	14 M
OR				
8	Draw the development of the lateral surface of the part P of the pyramid, the front view of which is shown in Fig. A hexagonal pyramid, two sides of the base parallel to the V.P. 	L3	CO3	14 M

UNIT-V

9	Draw the following views of the object shown pictorially in Fig. i) Front view ii) Top view iii) Side view from the right.	L3	CO4	14 M
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OR

10	Draw the following views of the block shown pictorially in Fig. i) Front view ii) Top view iii) Side view from the right.	L3	CO4	14 M
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