

ANURAG Engineering College

(An Autonomous Institution)

I B.Tech II Semester Supplementary Examinations, January – 2025

ENGINEERING GRAPHICS

(COMPUTER SCIENCE AND ENGINEERING)

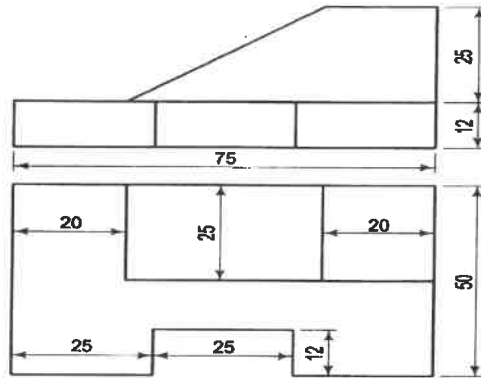
Time: 3 Hours**Max. Marks: 75****Section A (Essay Questions)****Answer all questions, each question carries equal marks.****(5 X 15M = 75M)**

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|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
| 1. A) | Draw an ellipse when the distance of its focus from its directrix is 50 mm and eccentricity is $\frac{2}{3}$. Also, draw a tangent and a normal to the ellipse at a point 70 mm away from the directrix. | CO1 | L3 | 15M |
| OR | | | | |
| B) | Draw the an involute of a circle of 40mm diameter. Also draw a tangent and a normal to the curve at a point 95mm from the centre of the circle. | CO1 | L3 | 15M |
| 2. A) | Draw the projections of the following points on a common reference line keeping the distance between their projectors 30 mm apart.
i) Point A is 20 mm below the H.P. and 50 mm in front of the V.P.
ii) Point B is in the H.P. and 40 mm behind the V.P.
iii) Point C is 30 mm in front of the V.P. and in the H.P.
iv) Point D is 50 mm above the H.P. and 30 mm behind the V.P.
v) Point E is 20 mm below the H.P. and 50 mm behind the V.P. | CO2 | L3 | 15M |
| OR | | | | |
| B) | One end A of a line AB, 75 mm long is 20 mm above HP and 25 mm in front of VP. The line is inclined at 30° to HP and top view makes 45° with VP. Draw the projections of the line and find the true inclinations with the vertical plane. | CO2 | L3 | 15M |
| 3. A) | 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 the top view of the diameter AB making 30° angle with the V.P. | CO3 | L3 | 15M |
| OR | | | | |
| B) | A pentagonal prism of base side 30 mm and axis length 60 mm is resting on HP on one of its rectangular faces with its axis parallel to both HP and VP. Draw its projections. | CO3 | L3 | 15M |
| 4. A) | Draw the isometric view of a cone of base diameter 50 mm and axis length 60 mm resting on HP on its base. | CO4 | L3 | 15M |

OR

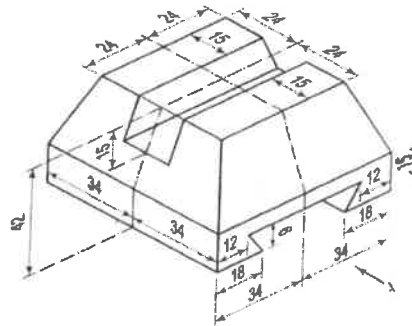
B) Draw the isometric view

CO4 L3 15M



5. A) Draw the
 i) Front view. ii) Side view from left. iii) Top view.

CO5 L3 15M



OR

B) Draw the
 i) Front view. ii) Side view from the left. iii) Top view.

CO5 L3 15M

