

ANURAG Engineering College
(An Autonomous Institution)
I B.Tech II Semester Supplementary Examinations, Jan/Feb-2024
ENGINEERING GRAPHICS
(COMMON TO CIVIL, EEE & MECH)

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

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|---|-----|----|-----|
| 1. A) Construct Hyperbola, when a distance between focus to directrix is 60mm and eccentricity is $3/2$. Also Draw tangent and normal to it at a distance of 65mm from directrix. | CO1 | L3 | 15M |
| OR | | | |
| B) A circle of 50 mm diameter rolls on a horizontal line for one revolution trace the path of curve. Also draw tangent and normal to it at any point. | CO1 | L3 | 15M |
| 2. A) The top view of 75 mm long line measures 65 mm while its front view measures 55 mm. Draw the projections of the straight line when one of the end is 25 mm above HP and 30 mm in front of VP. | CO2 | L3 | 15M |
| OR | | | |
| B) A line AB 100mm long has its front view inclined at an angle of 45° to XY. The point A is in the VP and 25mm above the HP. The length of the front view is 60mm. Draw The top view of the line and measure its length also find its inclination of AB with HP and VP. | CO2 | L3 | 15M |
| 3. A) Draw the projection of a pentagonal prism, base 20 mm side and axis 50mm long, resting on one of its rectangular faces on the ground with the axis inclined at 30° to the VP. | CO3 | L3 | 15M |
| OR | | | |
| B) Draw the projections of a cone, base 75 mm diameter and axis 100 mm long, lying on the H.P. on one of its generators with the axis parallel to the V.P. | CO3 | L3 | 15M |
| 4. A) Draw the development of a cone of diameter 40mm axis length 65mm is sectioned by a plane inclined at 35° to HP and passing through midpoint of the axis of the cone. | CO4 | L3 | 15M |
| OR | | | |
| B) Draw the development of a Pentagonal Pyramid of base side 30mm and axis length 65mm is sectioned by a plane inclined at 35° to HP and bisecting the axis. | CO4 | L3 | 15M |
| 5. A) Draw the isometric view of a Cone of base diameter 40mm axis length 60 mm. | CO5 | L3 | 15M |

OR

B) Draw front view top view and side view for the following figure:

CO5

L3

15M

