Question Paper Code: R15A12ME01

R15

ANURAG Engineering College

(An Autonomous Institution)

I B.Tech II Semester Supplementary Examinations, June/July – 2024

ENGINEERING GRAPHICS

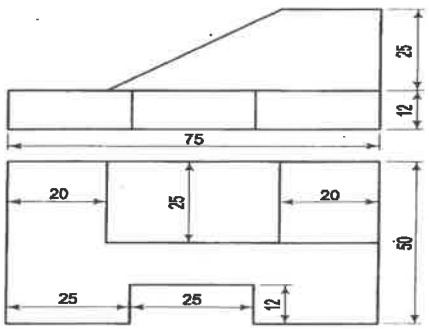
(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours **Max.Marks:75**

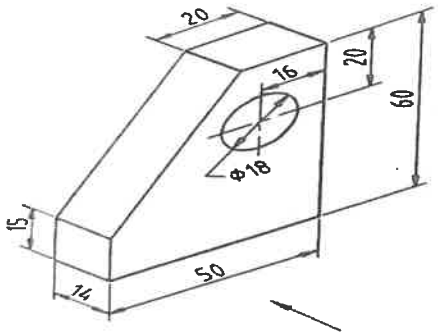
Section A (Essay Questions)

Answer all questions, each question carries equal marks. **(5 X 15M = 75M)**

1. A)	A point P is 30 mm and 50 mm respectively from two straight lines which are at right angles to each other. Draw a rectangular hyperbola from P within 10 mm distance from each line.	CO1	L3	15M
	OR			
B)	A circle of 50 mm diameter rolls on the circumference of another circle of 175 mm diameter and outside it. Trace the locus of a point on the circumference of the rolling circle for one complete revolution. Name the curve. Draw a tangent and a normal to the curve at a point 125 mm from the centre of the directing circle.	CO1	L3	15M
2. A)	A point A is 25 mm above HP and 35 mm in front of VP. Another point B is 30 mm below HP and 40 mm behind VP. Draw the projections of these points taking the distance between the end projectors as 60 mm. Also find the length of the line joining their plans and elevations.	CO2	L3	15M
	OR			
B)	A line AB 70 mm long, has its end A 35 mm above HP and 30 mm in front of VP. The top view and front view has a length of 45 mm and 60 mm respectively. Draw its projections.	CO2	L3	15M
3. A)	A hexagonal plate of side 30 mm is resting on one of its sides on VP and inclined at 40° to HP. Its surface is inclined at 35° to VP. Draw its projections.	CO3	L3	15M
	OR			
B)	A cone 50 mm base and axis 60 mm long touches the VP on a point of its base circle. The axis is inclined at 30^0 to VP and the front view of the axis is inclined at 45^0 to HP. Draw its projections.	CO3	L3	15M
4. A)	A hexagonal prism of base side 30 mm and axis length 60 mm is resting on HP on its base with a side of base parallel to VP. Draw the isometric view of the prism.	CO4	L3	15M
	OR			
B)	Draw the isometric view	CO4	L3	15M



5. A)	Draw the Front view, Top view and left-Side view of the object shown in fig.	CO5	L3	15M



OR

B)	Draw the front view, top view and right-side view of the object shown in fig.	CO5	L3	15M