R22

ANURAG Engineering College
(An Autonomous Institution)
I B.Tech I Semester Regular Examinations, Jan/Feb–2024
COMPUTER AIDED ENGINEERING GRAPHICS
(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours   **Max. Marks: 60**

Section – A (Short Answer type questions)   (10 Marks)
Answer All Questions

		Course Outcome	B.T Level	Marks
1.	How an axis line be represented?	CO1	L1	1M
2.	What is the difference between epicycloid and hypocycloid?	CO1	L2	1M
3.	Draw the projections of the line CD of 60 mm when it is resting on both H.P and V.P.	CO2	L2	1M
4.	Draw the symbols for first angle projection.	CO2	L1	1M
5.	A cone is resting on its base on the H.P. What is the shape of its top view?	CO3	L1	1M
6.	What is meant by right regular solid?	CO3	L1	1M
7.	What is meant by development of surface of a solid?	CO4	L1	1M
8.	Sketch the development of a cube of base edge of 30 mm.	CO4	L2	1M
9.	What is the relation between true length and isometric length?	CO5	L1	1M
10.	What is the isometric view of a sphere?	CO5	L1	1M

Section B (Essay Questions)
Answer all questions, each question carries equal marks.   (5 X 10M = 50M)

			Course Outcome	B.T Level	Marks
11.	A)	The distance between two towns is 250 km and is represented by a line of length 50mm on a map. Construct a scale to read 600 km and indicate a distance of 530 km on it.	CO1	L3	10M
		OR			
	B)	Construct a parabola when the distance between focus and the directrix is 40 mm. Draw tangent and normal at any point P on the curve.	CO1	L3	10M
12.	A)	A line CD 80mm long is inclined at an angle of 30^0 to H.P and 45^0 to V.P. The point C is 20mm above H.P and 30mm in front of V.P. Draw the projections of the straight line.	CO2	L3	10M
		OR			
	B)	The top view of a 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the H.P and 12 mm in front of the V.P. Draw the projections of AB and determine its inclinations with the H.P and the V.P.	CO2	L3	10M
13.	A)	A square pyramid of base side 40mm and axis 55mm is resting on one of its triangular faces on the HP. A vertical plane containing the axis is inclined at 45° to the VP. Draw its projections.	CO3	L3	10M
		OR			
	B)	Draw the projections of a cylinder of 40mm diameter and axis 60mm long, when it is lying on H.P, with its axis inclined at 45° to H.P and parallel to V.P.	CO3	L3	10M

14. A) Develop of a hexagonal pyramid with side of base 30 mm and height 60 mm.   CO4   L3   10M

OR

B) A cone of base diameter is 50mm and axis 60mm long is resting with its base on H.P. It is cut by a section plane perpendicular to the V.P and inclined at 60^0 to the H.P and bisecting axis. Draw the development.   CO4   L3   10M

15. A) Draw an isometric view of a cylinder of base diameter 40mm and axis 60mm long, in the following position.
i) Vertical   ii) Horizontal.   CO5   L3   10M

OR

B) Draw the front view, top view and right side view of the object given in figure below. All dimensions are in mm.   CO5   L3   10M