

**ANURAG Engineering College**  
(An Autonomous Institution)  
**I B. Tech I Semester Regular Examinations, January - 2025**  
**COMPUTER AIDED ENGINEERING GRAPHICS**  
(COMPUTER SCIENCE &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 do you read and interpret engineering drawings?	CO1	L1	1M
2. What do you mean by R.F?	CO1	L1	1M
3. What is third angle projection?	CO2	L1	1M
4. Define a straight line.	CO2	L1	1M
5. What are right solids?	CO3	L1	1M
6. What is the different between prism and pyramid?	CO3	L1	1M
7. What are the applications of Development of the surfaces?	CO4	L1	1M
8. What are the different methods of development of surfaces?	CO4	L1	1M
9. What is an isometric scale?	CO5	L1	1M
10. What are isometric and non-isometric lines?	CO5	L1	1M

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

11. A) Construct a hyperbola when the distance between the focus and directrix is 45 mm and eccentricity is  $5/4$ . Also, draw the tangent and normal to any point on the curve. CO1 L3 10M
- OR**
- B) Draw an epicycloid of rolling circle of diameter 40 mm which rolls outside another circle (base circle) of 150 mm diameter for one revolution. Draw a tangent and normal at any point on the curve. CO1 L3 10M
12. A) One end A of line AB, 75 mm long is 20 mm above HP and 25 mm in front of VP. The line is inclined at  $30^\circ$  to HP and the top view makes  $45^\circ$  VP. Draw the projection of the line and find the inclinations with the vertical plane. CO2 L3 10M
- OR**
- B) A regular pentagon of side 30 mm has one of its edges parallel to VP and inclined at  $30^\circ$  to HP. The pentagon is inclined at  $45^\circ$  to VP. Draw its projections. CO2 L3 10M
13. A) A hexagonal pyramid with a base side of 30 mm and an axis length of 60 mm is resting on one of its base edges with the face containing the resting edge perpendicular to both HP and VP. Draw its projections. CO3 L3 10M
- OR**
- B) A cylinder of base diameter 50 mm and axis length 70 mm is resting on HP on a point on the circumference of the base with its axis inclined at  $50^\circ$  to HP and parallel to VP. Draw its projections. CO3 L3 10M

14. A) A cylinder of diameter of base 40 mm and axis 55 mm long, is resting on its base on HP. It is cut by a section plane, perpendicular to VP and inclined at 45 degree to HP. The section plane is passing through the top end of an extreme generator of the cylinder. Draw the development of the lateral surface of the cut cylinder

CO4      L3      10M

**OR**

B) A pentagonal pyramid, side of base 30 mm and height 52 mm, stands with its base on HP and an edge of the base is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 40 degree to HP and passing through a point on the axis, 32 mm above the base. Draw the development of the lateral surface of the truncated pyramid

CO4      L3      10M

15. A) Draw an isometric view of a pentagonal pyramid having a base , with a 30 mm side and 50mm long axis i) when the its axis is vertical    ii) when the its axis is horizontal?

CO5      L3      10M

**OR**

B) Draw front view, top view and side view of given figure (All dimensions are in mm).

CO5      L3      10M

