



TONTADARYA COLLEGE OF ENGINEERING

(Department of CSE)

Internal Assessment –II (18CS62)

Subject : CG
Semester : 6

Date : 14.06.2022
Time : 12.30 pm to 1.30pm

Answer following questions choosing one question from each part

Total Marks: 50

PART-A

CO

- Q1 ✓ 1. With a neat figure explain two dimensional viewing pipeline. 12M (CO3)
2. Explain Scanline Polygon Filling Algorithm with neat sketches and example. 13M (CO3)

OR

- Q2. 1. Discuss with neat sketches and example various polygon types in OpenGL. 12M (CO3)
2. Explain the following 13M (CO3)
a) OpenGL viewing Functions b) OpenGL geometric transformations functions

PART-B

- Q3 ✓ 1. With the help of matrix representations, Explain 2D composite translation, rotation and scaling? 12M (CO4)
2. What is concatenation of transformation? Explain the following considered 2D 13M (CO4)
a) Rotation About a fixed point b) Scaling About a fixed point.

OR

- Q4. 1. Explain the with neat sketches and exmple Cohen-Sutherland Line Clipping. 12M (CO4)
2. Define the following three-dimensional transformation 13M (CO4)
1. Translation 2. Rotation 3. Scaling 4. Reflection.

Course Outcome	Complete Title
CO3	Apply concepts of clipping and visible surface detection in 2D and 3D viewing, and Illumination Models
CO4	Decide suitable hardware and software for developing graphics packages using OpenGL