Code: CS6T3

III B.Tech - II Semester – Regular/Supplementary Examinations
AUGUST 2021

COMPUTER GRAPHICS
(COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours   Max. Marks: 70
PART – A
Answer *all* the questions.   All questions carry equal marks

11x 2 = 22 M

1.

a) List the properties of video display devices.
b) What specifications are necessary for the camera?
c) Which types of font rendering are supported by GLUT?
d) What is the purpose of a terminal server?
e) Define scan line interpolation.
f) What are the procedures for using vertex arrays?
g) What are parallel views?
h) What is Projection reference point?
i) Define scanlines.
j) What is meant by odd-even rule?
k) What are the some of the issues to be addressed to display anything?

PART – B

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Enlist the applications of computer graphics and explain.

6 M

   b) What are OpenGL line and point functions? Illustrate about
      the line and point attribute functions.   10 M

3. a) What are the different modes to obtain the measure of a
      device?   8 M

   b) Write a program to draw a square by pressing the left
      button and to terminate the program by pressing the right
      button.   8 M

4.   Derive the transformations for rotation, translation, and
      scaling.   16 M

5.   Describe in detail about the perspective projections with
      necessary diagrams.   16 M

6.   Consider an example and apply Cohen-Sutherland line
      clipping algorithm. Explain the steps.   16 M