

Code No: 155AM**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, August - 2022****COMPUTER GRAPHICS****(Common to CSE, IT)****Time: 3 Hours****Max.Marks:75**

Answer any five questions
All questions carry equal marks

- 1.a) List and explain some applications of large screen displays.
- b) Explain about the characteristics of Direct View Storage Tube devices. [8+7]
- 2.a) Explain the flood fill algorithm.
- b) Digitize the line with end-points (20, 10) and (30, 18) using DDA algorithm. [8+7]
- 3.a) Derive the transformation matrix for reflection about $y = mx + b$.
- b) What is meant by composite transformation? When is it used? Explain. [8+7]
- 4.a) Explain the flow chart corresponding to cohen-suther land line clipping algorithm.
- b) Describe the different ways of representing points in 2-D. [8+7]
- 5.a) Explain the process of generating curves and surfaces using hermit method.
- b) Write a short note on B-Splines. [8+7]
- 6.a) Define view volume. Explain about it briefly.
- b) Describe the procedure for reflecting about an arbitrarily selected plane. [8+7]
- 7.a) Explain about depth buffer algorithm.
- b) Write a short note on back face detection. [8+7]
- 8.a) Discuss about the steps in design of animation sequence.
- b) Explain the characteristics of Key frame animation. [8+7]

---oo0oo---