

Code No: 155AM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2021

COMPUTER GRAPHICS

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

Answer any five questions  
All questions carry equal marks

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- 1.a) Give explanation in detail about the raster - scan displays.  
b) What are the steps involved in Bresenham's algorithm for line drawing? [7+8]
- 2.a) Briefly explain about flood-fill algorithm.  
b) Write a short note on video display devices. [7+8]
- 3.a) Explain in detail about composite transformations.  
b) Show the reflection about the  $y=x$  is attained by reverse co-ordinates. [7+8]
- 4.a) Explain Cohen Sutherland algorithm with suitable example.  
b) Write a short note on windowing. [8+7]
- 5.a) Explain various methods for generation of curves and surfaces.  
b) List properties of Bezier and B-Spline curves. [7+8]
- 6.a) Briefly explain about 3D reflection.  
b) Derive the matrix form for Translation in 3-D graphics. [7+8]
- 7.a) List and explain about steps of animation.  
b) Discuss the characteristics of key frame animation. [7+8]
- 8.a) Explain in detail about depth-buffer algorithm.  
b) Explain in detail about binary-space partitioning trees. [7+8]

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