Total No. of Questions : 8] *[Total No. of Printed Pages : 2*

Roll No .....

MCADD-504

M.C.A. (Integrated), V Semester

Examination, May 2022

Computer Graphics

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What is Raster scan display? How is it different from Random Scan display?

   b) What is aliasing? Explain how antialiasing overcome the problem of aliasing?

2. a) Calculate the pixel positions along a straight line between A (10,12) and B (20, 20) using DDA algorithm.

   b) What is transformation? Explain two dimensional transformations.

3. a) What is 3D transformation? Write about shear transformations.

   b) Explain in detail about the scan line algorithm.

4. a) Explain the Cohen Sutherland line clipping algorithm with the help of an example.

   b) Compare and contrast flood fill and boundary fill algorithms.

5. a) Explain Bezier curve and specify about the properties of Bezier curve.

   b) Explain in detail about view port clipping.

6. a) Compare and contrast perspective projection with the parallel projection. Justify your answer that perspective projections preserve lateral measurements.

   b) Discuss various colour models used in graphics system.

7. a) Specify mid-point circle algorithm. Using the same, plot the circle whose radius about 10 units.

   b) Explain window, view port, and derive window view port transformations.

8. Write short note on any Two:

   a) Composite transformation

   b) Text clipping

   c) Frame buffer

   d) 3D rotate transformation.

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