

IT - 602
B.E. VI Semester
Examination, December 2014
Computer Graphics and Multimedia
Time : Three Hours Maximum Marks : 70

Note: Attempt all questions. With internal choice.

Unit - I

1. Describe the architecture of a raster scan display with a clear block diagram. How it differ from random scan display. 14

OR

2. Explain the working principles of mouse, keyboard and camera? 14

Unit - II

3. Write Bresenham's line drawing algorithm for slope greater than 1, and also draw the line between the end points (10, 20) and (18, 30). 14

OR

4. a) Explain DDA algorithm. What are its main disadvantages. 7
b) If a Bezier curve passes through (2, 1) and (6, 2) and controlled by the points (3, 2) and (5, 0) find the equation of Bezier curve. 7

Unit - III

5. Given a triangle A (10, 10), B (20, 10), C (15, 20) find transformed co-ordinates of A, B, C when the triangle is rotated in anticlockwise direction to an angle of 45° about the fixed points (15, 10). 14

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6. a) Explain Phong and ground shading. 7
b) A unit cube is placed at origin with its edges parallel to co-ordinate axes and three of the edges coinciding with the axes. Find perspective projection of this unit cube on the plane $z=0$ when it is viewed from the point (2, 3, 5). 7

Unit – IV

7. Describe SCSI and IDE in brief. 14

OR

8. Explain different types of authoring tools. 14

Unit - V

9. a) Discuss the PEG and MPEG file format standard. 7
b) Explain compression ratio and image quality. 7

OR

10. Discuss various multimedia data file format standard in detail. 14