Code No: NR320501 **NR** **Set No. 2**

III B.Tech II Semester Examinations,December 2010
COMPUTER GRAPHICS
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Write about the following:
   (a) Sutherland-Hodgman clipping
   (b) Cohen-suther land clipping. [10+6]
2. Write an algorithm for interpreting the display file. [16]
3. Write a procedure for deleting a segment. [16]
4. (a) For a 10*10 frame buffer, interpret Bresenham's algorithm to find which pixels are turned on for the line segment between the points (5,8) and (9,5).
   (b) What steps are required to plot a line whose slope is between 0 and 45 degrees using the Bresenham's line drawing algorithm? [8+8]
5. Explain various methods for generation of curves and surfaces. [16]
6. Write an algorithm to perform 2D incremental rotation. How much time is needed per endpoint? Compare this time needed per endpoint for absolute 2D rotation. [16]
7. (a) Explain the basic conepts of hidden surfaces and line removal methods with suitale examples.
   (b) Write about z-buffers. [10+6]
8. Explain the terms:
   (a) View plane
   (b) View reference point
   (c) View plane distance [16]

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Code No: NR320501 **NR** **Set No. 4**

III B.Tech II Semester Examinations,December 2010
COMPUTER GRAPHICS
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Explain the basic conepts of hidden surfaces and line removal methods with suitale examples.
   (b) Write about z-buffers. [10+6]
2. (a) For a 10*10 frame buffer, interpret Bresenham's algorithm to find which pixels are turned on for the line segment between the points (5,8) and (9,5).
   (b) What steps are required to plot a line whose slope is between 0 and 45 degrees using the Bresenham's line drawing algorithm? [8+8]
3. Write a procedure for deleting a segment. [16]
4. Write an algorithm to perform 2D incremental rotation. How much time is needed per endpoint? Compare this time needed per endpoint for absolute 2D rotation. [16]
5. Explain various methods for generation of curves and surfaces. [16]
6. Write an algorithm for interpreting the display file. [16]
7. Explain the terms:
   (a) View plane
   (b) View reference point
   (c) View plane distance [16]
8. Write about the following:
   (a) Sutherland-Hodgman clipping
   (b) Cohen-suther land clipping. [10+6]

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Code No: NR320501 **NR** **Set No. 1**

III B.Tech II Semester Examinations,December 2010
COMPUTER GRAPHICS
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) For a 10*10 frame buffer, interpret Bresenham's algorithm to find which pixels are turned on for the line segment between the points (5,8) and (9,5).
   (b) What steps are required to plot a line whose slope is between 0 and 45 degrees using the Bresenham's line drawing algorithm? [8+8]
2. Explain the terms:
   (a) View plane
   (b) View reference point
   (c) View plane distance [16]
3. Write about the following:
   (a) Sutherland-Hodgman clipping
   (b) Cohen-suther land clipping. [10+6]
4. Write an algorithm for interpreting the display file. [16]
5. Explain various methods for generation of curves and surfaces. [16]
6. Write an algorithm to perform 2D incremental rotation. How much time is needed per endpoint? Compare this time needed per endpoint for absolute 2D rotation. [16]
7. (a) Explain the basic conepts of hidden surfaces and line removal methods with suitale examples.
   (b) Write about z-buffers. [10+6]
8. Write a procedure for deleting a segment. [16]

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Code No: NR320501 **NR** **Set No. 3**

III B.Tech II Semester Examinations,December 2010
COMPUTER GRAPHICS
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Explain various methods for generation of curves and surfaces. [16]
2. Write a procedure for deleting a segment. [16]
3. Write an algorithm to perform 2D incremental rotation. How much time is needed per endpoint? Compare this time needed per endpoint for absolute 2D rotation. [16]
4. Write an algorithm for interpreting the display file. [16]
5. (a) Explain the basic conepts of hidden surfaces and line removal methods with suitale examples.
   (b) Write about z-buffers. [10+6]
6. Explain the terms:
   (a) View plane
   (b) View reference point
   (c) View plane distance [16]
7. (a) For a 10*10 frame buffer, interpret Bresenham's algorithm to find which pixels are turned on for the line segment between the points (5,8) and (9,5).
   (b) What steps are required to plot a line whose slope is between 0 and 45 degrees using the Bresenham's line drawing algorithm? [8+8]
8. Write about the following:
   (a) Sutherland-Hodgman clipping
   (b) Cohen-suther land clipping. [10+6]

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