Code.No: RR311203 | RR | SET-1

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
COMPUTER GRAPHICS
(COMMON TO ECC, IT)

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

Answer any FIVE questions
All questions carry equal marks
- - -

1. Explain the following:
   a) CRT
   b) LCD
   c) Frame buffer
   d) Resolution. [4+4+4+4]

2. Explain the Bresenham's circle drawing algorithm with the help of an example. [16]

3. List the basic geometric transformations. Derive mathematically the transformation matrices for each of the basic transformations. [16]

4.a) Discuss the merits and demerits of Cohen-Sutherland out code algorithm.
b) Explain the basic transformations used in viewing transformation. [8+8]

5. The vector V is defined as $V = a_1I + b_1J + c_1K$ and vector N is defined as $N = a_2I + b_2J + c_2K$. Find the transformation $A_{v,n}$ which aligns the vector V with the vector N. [16]

6. Classify the parallel projections and describe the characteristics of each kind. [16]

7.a) How is the depth of a polygon determined by the painter's algorithm?
b) What are the merits and demerits of Z-buffer algorithm? [8+8]

8.a) Distinguish the properties of B-Spline and Bezier curves.
b) What is meant by animation? Explain. [8+8]

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Code.No: RR311203 | RR | SET-2

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
COMPUTER GRAPHICS
(COMMON TO ECC, IT)

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

Answer any FIVE questions
All questions carry equal marks
- - -

1. List the basic geometric transformations. Derive mathematically the transformation matrices for each of the basic transformations. [16]

2.a) Discuss the merits and demerits of Cohen-Sutherland out code algorithm.
b) Explain the basic transformations used in viewing transformation. [8+8]

3. The vector V is defined as $V = a_1I + b_1J + c_1K$ and vector N is defined as $N = a_2I + b_2J + c_2K$. Find the transformation $A_{v,n}$ which aligns the vector V with the vector N. [16]

4. Classify the parallel projections and describe the characteristics of each kind. [16]

5.a) How is the depth of a polygon determined by the painter's algorithm?
b) What are the merits and demerits of Z-buffer algorithm? [8+8]

6.a) Distinguish the properties of B-Spline and Bezier curves.
b) What is meant by animation? Explain. [8+8]

7. Explain the following:
a) CRT
b) LCD
c) Frame buffer
d) Resolution. [4+4+4+4]

8. Explain the Bresenham's circle drawing algorithm with the help of an example. [16]

--ooOoo--

Code.No: RR311203 | RR | SET-3

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
COMPUTER GRAPHICS
(COMMON TO ECC, IT)

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

Answer any FIVE questions
All questions carry equal marks
- - -

1. The vector V is defined as $V = a_1I + b_1J + c_1K$ and vector N is defined as $N = a_2I + b_2J + c_2K$. Find the transformation $A_{v,n}$ which aligns the vector V with the vector N. [16]

2. Classify the parallel projections and describe the characteristics of each kind. [16]

3.a) How is the depth of a polygon determined by the painter's algorithm?
b) What are the merits and demerits of Z-buffer algorithm? [8+8]

4.a) Distinguish the properties of B-Spline and Bezier curves.
b) What is meant by animation? Explain. [8+8]

5. Explain the following:
a) CRT
b) LCD
c) Frame buffer
d) Resolution. [4+4+4+4]

6. Explain the Bresenham's circle drawing algorithm with the help of an example. [16]

7. List the basic geometric transformations. Derive mathematically the transformation matrices for each of the basic transformations. [16]

8.a) Discuss the merits and demerits of Cohen-Sutherland out code algorithm.
b) Explain the basic transformations used in viewing transformation. [8+8]

--ooOoo--

Code.No: RR311203 | RR | SET-4

III B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
COMPUTER GRAPHICS
(COMMON TO ECC, IT)

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

Answer any FIVE questions
All questions carry equal marks
- - -

1.a) How is the depth of a polygon determined by the painter's algorithm?
b) What are the merits and demerits of Z-buffer algorithm? [8+8]

2.a) Distinguish the properties of B-Spline and Bezier curves.
b) What is meant by animation? Explain. [8+8]

3. Explain the following:
a) CRT
b) LCD
c) Frame buffer
d) Resolution. [4+4+4+4]

4. Explain the Bresenham's circle drawing algorithm with the help of an example. [16]

5. List the basic geometric transformations. Derive mathematically the transformation matrices for each of the basic transformations. [16]

6.a) Discuss the merits and demerits of Cohen-Sutherland out code algorithm.
b) Explain the basic transformations used in viewing transformation. [8+8]

7. The vector V is defined as $V = a_1I + b_1J + c_1K$ and vector N is defined as $N = a_2I + b_2J + c_2K$. Find the transformation $A_{v,n}$ which aligns the vector V with the vector N. [16]

8. Classify the parallel projections and describe the characteristics of each kind. [16]

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