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Roll No ....

CS-504 (GS)

B.E. V Semester

Examination, December 2017

Grading System (GS)

Computer Graphics and Multimedia

Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain the Raster Scan graphics with application area of Raster Graphics. Also explain how we generate Raster Image?   7

   b) Compare simple DDA line drawing algorithm with Bresenham's algorithm. Does the points generated by both algorithms are same?   7

2. a) What do you mean by aliasing and antialiasing? Discuss one method for antialiasing?   7

   b) A triangle having the vertex at A(0, 0) B(5, 5) and C(10, 4). Find the transformation matrix for rotation of 45° about origin?   7

3. Explain the following with the reference of 2D transformations: 14
   i)   Translation
   ii) Scaling
   iii) Rotation

4. a) Define each of the following :   7
   i)   World Coordinate System (WCS)
   ii) Viewing Coordinate System (VCS)

   b) What is Perspective projection? What do you mean by vanishing point and perspective forecasting?   7

5. Explain Bezier curve with its properties and compare this curve with B spline curves.   14

6. a) What are the components of Multimedia System? In what format data is stored in a computer.   7

   b) Explain any two Audio File Formats.   7

7. a) Which transform domain technique is used in JPEG compression?   7

   b) What is Animation? Discuss the principles of animation? Write various application of animation.   7

8. Write a short notes (any three):   14
   a) Video File Formats
   b) Multimedia databases
   c) Shading
   d) Text File Formats
   e) Clipping

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