OXFORD COLLEGE OF ENGINEERING AND MANAGEMENT
Assignment1

Level: Bachelor Semester –Spring Year : 2018
Programme:BCA Full Marks: 100
Course:Computer Graphics and Multimedia Pass Marks: 45
  Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

Note: Submission Date 26th July 2018. The assignments which will be submitted after deadline will not be acceptable.

Attempt allthe questions.

1. a) Describe the application of computer graphics in the context of modern world. 8
   b) How are different colors displayed in color CRT monitors? Describe the shadow mask method for color manipulation in the CRT display systems. 7
2. a) Derive the Bresenham's line drawing algorithm for a line with |m|<1. 8
   b) Given A(1,1), B(6,1) & C(6,6) as the vertices of ΔABC, rotate the triangle by 60^0 in counterclockwise direction about a fixed point (3,2). 7
3. a) Derive mid pint circle algorithm. 8
   b) Define Polygon rendering Methods. Explain Gauroud shading and phong shading in detail. 7
4. a) Prove that two successive translations and scaling are additive and multiplicative and nature respectively. 7
   b) Explain window to viewport co-ordinate transformation. 8
5. a) Consider a line from P1(-1,1) and P2(7,4). Determine its visibility against the window size(0,0),(6,0),(6,3) and (0,3). 7
   b) Differentiate between Random Scan System and Raster Scan System. 8
6. a) What are the various methods for generating non planner surfaces. 7
   b) Explain parallel projection and perspective projection with mathematical derivation. 8
7. Write short notes on : 2×5
   a) Types of Digitizer.
   b) Homogenous Coordinate System
   c) Visible surface Detection

OXFORD COLLEGE OF ENGINEERING AND MANAGEMENT
Assignment2

Level: Bachelor Semester –Spring Year : 2018
Programme:BCA Full Marks: 100
Course:Computer Graphics and Multimedia Pass Marks: 45
  Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

Note: Submission Date 5th August 2018. The assignments which will be submitted after deadline will not be acceptable.

Attempt allthe questions.

1. a) Define Multimedia. Explain various application of multimedia. 8
   b) What is multimedia team. Explain the roles and responsibilities of each multimedia team member. 7
2. a) What is the necessity of multimedia software. Explain the features of text editing tools and painting/drawing tools. 8
   b) What are the types of multimedia authoring tools. Explain 7
3. a) Explain the terms Text design issues, Truetype and Btmap fonts. 8
   b) What is tapestry? Explain various font designing tools. 7
4. a) Differentiate between MIDI and Digital sound. 7
   b) What is Red book standard of sound. Explain factors that affects sound standards. 8
5. a) Define electromagnetic spectrum. Explain additive and subtractive color. 7
   b) What are color models? Explain. 8
6. a) Define palette management. Explain various graphics importing software. 7
   b) What are the principles of animation. Explain. 8
7. Write short notes on **any two:** 2×5
   a) Broadcast video standards
   b) Mechanism of video display
   c) The Jaggies