May 2015
Bachelor of Computer Application (BCA) Examination
VI Semester

Computer Graphics and Multimedia

Time : 3 Hours]   [Max. Marks : 50

Note : *Attempt any two parts from each question. All questions carry equal marks.*

1. (a) Briefly discuss thee focusing system of CRT color monitor.
   (b) Differentiate raster scan and random scan displays.
   (c) Define pixel, buffer and frame.

2. (a) What are the advantages and disadvantages of DDA line generation algorithm ?
   (b) Dilcuss anti-aliasing with example.
   (c) Derive the equation for reflection on $y = -x$.

3. (a) Describe 3D clipping procedure.
   (b) When a 3D object in to be rotated about any axis that is parallel to x-axis, we need to perform additional transformations. Derive the 3D rotation transformation matrix for rotation of an object about x-axis.
   (c) What are the steps involved for filling a polygon using the scan fill algorithm ?

4. (a) What are different category of animation ? Discuss.
   (b) What is MIDI ? How does it works ?
   (c) Explain the following :
       (i) Adding Texture to Faces.
       (ii) Building Camera in a Program.

5. (a) What is video compression ? How it is performed ? Write two video compression tools.
   (b) What are the audio and video recording formats ? Write name of tools for audio and video recording.
   (c) Discuss any one Broadcast Video Standard.

✳ ✳ ✳