

SIXTH SEMESTER BCA (CCSS) DEGREE EXAMINATION, MARCH 2013

CA6B14 – COMPUTER GRAPHICS & MULTIMEDIA

Time : Three Hours

Maximum : 30 Weightage

I. Answer all 12 questions. 12x V, = 3 weightage.

1. In raster scan displays_ the picture definition is stored in a memory area called
- 2_ Say true or false: Shadow-mask is a technique used in Plasma displays.
3. is a scan line conversion line algorithm based on calculating either S_x or S_y .
- 4: The reflection about the line $y = 0$ is accomplished with the transformation matrix
5. is an example of polygon clipping algorithm.
6. Say true or false: Transformation matrix for a reflection about the line $y=x$ is equivalent to a reflection relative to the x -axis followed by a counterclockwise rotation of 45° .
7. is an example of video file format.
8. MIDI stands for
9. Sound pressure levels (loudness or volume) are measured in
- 10_ The collection of color values held in a color lookup table is called a
11. In multimedia authoring systems, multimedia elements and events are often treated as that live in a hierarchical order of parent and child relationships.
12. The first and last frame of an action are called

II. Answer all 9 questions. 9 x 1= 9 weightage.

13. Define resolution and pixel.
14. Define virtual reality.
- 15_ Define window and view port_

16. Explain 2D translation. Give matrix formulation or 2D transformation.

Define multimedia.

18. Define sampling and quantization.

32. Write any four image processing operations.

19. Write the basic steps in JPEG.

20. Explain the representation of digital images.

21. List any four properties of multimedia systems.

III. Answer any 5 questions. $5 \times 2 = 10$ weightage.

• 72. Write a note on video controller.

23. Discuss any four applications of computer graphics.

24. Write a note on 2D composite transformation.

25. Write a note on audio file formats.

26. Write a note on animation techniques.

27. Write a note on multimedia authoring tools.

28. Write a note on hybrid compressing techniques.

IV. Answer any 2 questions, $2 \times 4 = 8$ weightage.

29. Write and explain Bresenham's line drawing algorithm. Illustrate with suitable example.

30. Write and explain any one line clipping algorithm. Illustrate with suitable example.

31. Give a detailed account of MPEG.