Q.P. CODE 12462

Fourth Semester B.C.A. Degree Examinations
October / November 2019
(Semester Scheme - 2016-17 Batch)

BCD 420 : COMPUTER GRAPHICS AND MULTI MEDIA

Time : 3 Hours Max. Marks : 80

I. Answer ALL questions: 1x5=5

1. Expand MIDI.
2. Expand CAD.
3. Mention any one advantage of Bresenham's line drawing algorithm.
4. What is translation ?
5. Define clipping.

II. Answer any FIVE of the following: 5x15=75

6. a) Define Multimedia, explain any two applications of multimedia.
   b) Explain the different stages of Multimedia Project.
   c) Write a note on different audio file formats. **(5+5+5)**

7. a) What is Computer graphics ? Explain any two applications of Computer graphics.
   b) With a neat diagram explain the working principle of CRT.
   c) Write a note on different input and output devices used in computer graphics. **(5+5+5)**

8. a) Explain DDA, write an algorithm to drawline using DDA.
   b) Using the following line coordinates plot the line graph using Bresenham's line drawing algorithm.
   Line coordinates (10, 13) (22, 25)
   c) Write a note on parallel line algorithm. **(5+5+5)**

9. a) Write an algorithm to generate circle using mid point circle generation.
   b) Write a note on Color and gray scale levels.
   c) Write a note on:
   i) Colour tables ii) Character attributes **(5+5+5)**

10. a) Explain transformation techniques by using matrix representation.

    b) What do you mean by Composite transformation ? Explain.

    c) Write a note on reflection and Shear. **(5+5+5)**

11. a) Explain window to viewport transformation.

    b) Explain Cohen-Sutherland outcode Algorithm.

    c) Differentiate between Cohen-Sutherland and Liang-Barskey line clipping algorithm. **(5+5+5)**

12. a) Writea note on Polygon clippintg using Sutherland - Hodgeman clipping algorithm.

    b) Briefly explain Text clipping.

    c) Write a note on Curve Clipping. **(5+5+5)**

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