

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc., B.C.A. DEGREE EXAMINATION – COMPUTER SC.&COMP. APP.**

FIFTH SEMESTER – APRIL 2010

**CS 5400 / CA 5400 - COMPUTER GRAPHICS**

Date & Time: 29/04/2010 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART-A**

(10 x 2 = 20)

**Answer all the questions**

- 1) What is Data Glove?
- 2) What are display processors?
- 3) What are the basic attributes of a character?
- 4) What is viewing transformation?
- 5) Define the term: Clipping.
- 6) Define Shear.
- 7) What is reflection?
- 8) Define Bitmap.
- 9) What is image space method?
- 10) What is Projection?

**PART-B**

(5 x 8 = 40)

**Answer all the questions**

- 11) a) Explain the working principles of DVST .

(OR)

- b) Write short notes on CRT monitor.

- 12) a) Explain about the Line Attributes.

(OR)

- b) Write about 2D transformation in

- i) Scaling ii) General Fixed Point Scaling.

13) a) Explain the Sutherland-Hodgeman polygon clipping method.

(OR)

b) Give a brief note on window to view port transformation.

14) a) Write a note on Perspective projection.

(OR)

b) Explain briefly about 3-D rotation.

15) a) Explain about the A-buffer method.

(OR)

b) Explain about the Back-Face detection method.

### **PART-C**

(2 x 20 = 40)

#### **Answer any TWO:**

16) a) Discuss in detail about Mid Point circle algorithm for drawing lines.

b) Explain the basic 2-D transformation for rotation.

17) a) Explain the various 3-D display methods.

b) Discuss in detail about the Parallel projection.

18) a) Explain Depth-Buffer method.

b) Explain in detail about the Bresenham's Line Drawing Algorithm with an example.

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