

ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)

IV SEMESTER BCA EXAMINATIONS - APRIL 2019

COMPUTER GRAPHICS

Duration: 2.5 Hours

Max. Marks: 70

SECTION - A

I) Answer any SIX of the following questions. (6x3=18)

1. Define Computer Graphics. List any 2 applications.
2. Differentiate between LCD and Plasma Display.
3. Define Aspect Ratio, electron gun.
4. What are the various attributes of Output Primitives?
5. Define Scaling. Write the matrices representation of 2D scaling.
6. What do you mean by 2D line clipping?
7. Define 3D Rotation.
8. Discuss about lightpen and joystick.

SECTION - B

II) Answer any FOUR of the following questions. (4x8=32)

9. Explain the working of CRT with a neat diagram.
10. What are the various graphic input devices? Explain in detail.
11. Discuss in detail about Bresenham's line drawing algorithm.
12. Explain the concept of Octree in detail.
13. Discuss in detail about Scan Line Method.
14. Explain a) Color Model b) Depth Buffer Method

SECTION - C

III) Answer any TWO of the following questions. (2x10=20)

15. What is the difference between window and view port? Give steps to transform objects from window to view port.
16. Define Clipping. Explain Cohen-Sutherland line clipping algorithm in detail.
17. What is Projection? Differentiate between Parallel and Perspective Projection.