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Total No. of Printed Pages: 1

Total No. of Questions: [09]

BCA (Semester – 6th)
COMPUTER GRAPHICS
Subject Code: BSBC602
Paper ID: [6160102]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. Section B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a Define Lookup Table.
- b What is the concept of ‘vanishing point’?
- c What is scan conversion?
- d Define shearing with example.
- e Explain working of Liquid Crystal Display.
- f Differentiate between Refresh buffer and Frame Buffer.
- g What is Flat-Panel Displays?
- h Define scaling with example.
- i Explain Graphics Monitors and Workstations.
- j What is view reference point?

Section – B

(10 marks each)

- Q2. (a) Differentiate between raster scan and random scan.
(b) Differentiate between active and passive graphics.
- Q3. Explain the working of Cohen-Sutherland line clipping algorithm with suitable example.
- Q4. (a) How long would it take to load a 640× 480 frame buffer with 12 bits per pixel, if 105 bits can be transferred per second.
(b) Calculate points on line from (0,0) to (4,-8) using Bresenham line drawing algorithm.
- Q5. (a) Differentiate between parallel and perspective projection.
(b) Explain in detail about 3D viewing transformation.
- Q6. Explain Midpoint Circle Generating Algorithm with a suitable example.
- Q7. What is a Cathode Ray Tube (CRT)? Explain the functioning of CRT with proper diagram.