Roll No. Total No. of Pages: 02

Total No. of Questions: 07

B.Sc.(IT) (2015 & Onward) (Sem.-6)
COMPUTER GRAPHICS
Subject Code: BSCIT-603

M.Code: 74728

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS TO 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 students have to attempt any FOUR questions.

SECTION-A

1. Answer the following:

- a) Describe in brief the concept of Perspective projection.
- b) How do flat-panel displays work?
- c) Write the 2-D Translation transformation matrix.
- d) What do you mean by the term Line Clipping?
- e) What is the need for Cartesian coordinate system?
- f) What is the difference between Active and Passive graphics?
- g) What are the shortcomings of Mid-point line drawing algorithm?
- h) Describe the working of Raster scan technique.
- i) Explain briefly the CMY color model.
- j) Define the point clipping equations.

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SECTION-B

- 2. What are the applications of Projections in graphics? How is Parallel projection different from Perspective projection?
- 3. Write the transformation matrices of 2-D translation, rotation and scaling. How are these different from the 3-D matrices?
- 4. How is Character generation achieved in computer graphics systems?
- 5. Write in detail about the Bresenhem's line drawing algorithm. Give a suitable example to demonstrate the working of the algorithm.
- 6. Describe Cohen Sutherland clipping algorithm. What is the use of Viewport and window in clipping?
- 7. What are the various Video display devices used in computers? How are Flat panel monitors different from the traditional Cathode ray tube monitors?

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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