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Total No. of Pages : 02

Total No. of Questions : 07

B.Sc.(IT) (2015 &amp; 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.



**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 Bresenham'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.**

