

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem.-5)

COMPUTER GRAPHICS

Subject Code : BTCS-515-18

M.Code : 78325

Date of Examination : 10-01-2023

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 FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) List common graphic input and output devices.
- b) What is Random Scan system?
- c) Discuss Ellipse generating algorithm.
- d) What is the role of scaling?
- e) Discuss boundary filling algorithm.
- f) Define composite transformations.
- g) Differentiate between HLS and HSV color models.
- h) Write properties of light.
- i) What is Rendering?
- j) Short note on Phong shading.

SECTION-B

2. Explain the viewing line clipping and text clipping.
3. Explain Translation and Rotation in three dimensional transformation.
4. What do you mean by color selection? Also write its applications.
5. Explain Matrix representation for 2D Transformations with suitable example.
6. Write about general Computer Animation Functions.

SECTION-C

7. Explain Bresenham Circle Algorithm.
8.
 - a) Give details of Plane projections and its types,
 - b) Explain Depth sort algorithm.
9. Write short note on the following :
 - a) Color CRT Monitors
 - b) CMY color model.

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.