

BT-7/M-21

47148

COMPUTER GRAPHICS AND ANIMATION

Paper–CSE 403 N

Option–II

Time allowed : 3 Hours**Maximum Marks : 75**

Note : Attempt **five** questions in all, selecting at least **one** question from each unit. All questions carry equal marks.

UNIT-I

1. (i) Describe computer graphics applications. 8
- (ii) Discuss line drawing algorithms. 7
2. Describe polygon filling algorithms in detail. 15

UNIT-II

3. (i) Explain translation, scaling, rotation and reflection in context to two dimensional transformation. 8
- (ii) Describe window to view port mapping. 7
4. (i) Discuss homogeneous coordinate system. 8
- (ii) Write a short note on rotation, shear and translation in 3D transformation. 7

UNIT-III

5. (i) Discuss 4-bit code algorithm. 8
- (ii) Explain Liang-Barsky line clipping algorithms. 7
6. (i) Write a short note on curve clipping. 8
- (ii) Differentiate between parallel projection and perspective projection and explain. 7

UNIT-IV

7. (i) Explain geometric continuity conditions. 8
- (ii) Write a short note on Beizer curves and surfaces. 7
8. (i) Explain hidden surface elimination. 8
- (ii) Write a short note on priority algorithm. 7