

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

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

UNIT-II

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| 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

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| 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

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| 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 |