

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

MCA I Year II Semester Regular & Supplementary Examinations August-2023
COMPUTER GRAPHICS

Time: 3 Hours**Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

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|----------|---|------------|-----------|-----------|
| 1 | a List out various video display devices. | CO2 | L1 | 4M |
| | b Explain Raster and Random Scan Displays. | CO2 | L2 | 8M |

OR

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| 2 | a Construct the steps for Bresenham's Line Algorithm. With example. | CO2 | L6 | 8M |
| | b Develop a program to implement Bresenham's Line Algorithm. | CO2 | L3 | 4M |

UNIT-II

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| 3 | Determine various kinds of 2D composite transforms in detailed with example. | CO4 | L3 | 12M |
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| 4 | Identify various kinds of 3D basic transformations with examples. | CO4 | L3 | 12M |
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UNIT-III

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| 5 | a Discuss about polygon clipping. | CO3 | L2 | 5M |
| | b Demonstrate Sutherland-Hodgeman Polygon Clipping. | CO3 | L2 | 7M |

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| 6 | Explain in detail about polygon surface with an example. | CO3 | L2 | 12M |
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UNIT-IV

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| 7 | a Explain Back-Face Detection Method. | CO5 | L2 | 6M |
| | b Build the steps for Depth-Buffer Method. | CO5 | L3 | 6M |

OR

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| 8 | Classify and explain various illumination models. | CO5 | L4 | 12M |
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UNIT-V

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| 9 | a Explain in detail about CMY Color Model. | CO6 | L2 | 6M |
| | b Explain in detail about HSV Color Model. | CO6 | L2 | 6M |

OR

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| 10 | a Write short notes on Animation. | CO6 | L1 | 6M |
| | b Identify various application areas of Animation. | CO6 | L3 | 6M |

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