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

B.Tech II Year II Semester Supplementary Examinations July-2022

OPERATING SYSTEMS

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|---|--|----|----|
| 1 | a What is an Operating system. | L1 | 2M |
| | b Define Time slice. | L1 | 2M |
| | c Define deadlock. | L1 | 2M |
| | d What is Thrashing? | L1 | 2M |
| | e What are the various operations performed in a File? | L1 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|---|--|----|----|
| 2 | a Explain Operating System Structures. | L2 | 5M |
| | b Explain System Programs. | L2 | 5M |

OR

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| 3 | Explain briefly different types of System calls. | L5 | 10M |
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UNIT-II

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| 4 | Explain CPU Scheduling Algorithms with examples. | L5 | 10M |
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| 5 | a What is synchronization? What are the different synchronization mechanisms? Explain in detail. | L2 | 5M |
| | b What is a process? Explain Process Control Block. | L1 | 5M |

UNIT-III

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| 6 | Define process synchronization and explain Peterson solution algorithms. | L2 | 10M |
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| 7 | a What are the methods for handling deadlock? | L4 | 6M |
| | b Explain about Deadlock Avoidance. | L5 | 4M |

UNIT-IV

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| 8 | a What is Segmentation? Explain with Example. | L1 | 5M |
| | b Explain about Paging. | L2 | 5M |

OR

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| 9 | Explain the different Disk scheduling algorithms with their comparisons. | L2 | 10M |
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UNIT-V

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| 10 | a Discuss about File type. | L6 | 5M |
| | b Explain about File operation. | L5 | 5M |

OR

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| 11 | Explain file allocation methods in detail. | L2 | 10M |
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END