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

B.Tech II Year II Semester Regular & Supplementary Examinations May 2019

OPERATING SYSTEM

(Computer Science & Engineering)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 a What is meant by Operating System? Explain the various types of Operating Systems. 8M
b Difference between Uni-Programming and Multi Programming. 4M

OR

- 2 a Explain Operating System Services. 7M
b List and explain the functions of Operating Systems. 5M

UNIT-II

- 3 a Write the difference between user level thread and kernel level thread. 6M
b What is meant by Process? Explain the process State diagram. 6M

OR

- 4 a Explain CPU Scheduling Algorithms with examples. 6M
b Evaluate SJF CPU Scheduling algorithm for given Problem.

Process	P1	P2	P3	P4
Process Time	8	4	9	5
Arrival Time	0	1	2	3

6M

UNIT-III

- 5 a Define process synchronization and explain Peterson solution algorithms. 7M
b What is Monitor? Explain with any example using monitor. 5M

OR

- 6 a Explain the solution for Dining-Philosophers Problem. 7M
b Discuss dead lock detection (Banker's Algorithm) with Example. 5M

UNIT-IV

- 7 a With the example explain the Segmentation. 7M
b What is swapping with respect to memory management? Explain. 5M

OR

- 8 a Explain dynamic memory partition allocation with example. 6M
b Discuss about page replacement algorithms with example. 6M

UNIT-V

- 9 a Explain about Trusted Platform Model. 7M
b What is secret key and public key cryptography? Explain. 5M

OR

- 10 a Explain about protection Matrix with Example. 7M
b Discuss the based protection with example. 5M

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