

Code: CS5T5

III B.Tech - I Semester – Regular Examinations – December 2016

OPERATING SYSTEMS
(COMPUTER SCIENCE AND ENGINEERING)

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1.

- a) Define an Operating System?
- b) What are system calls?
- c) What is process? Mention its operations.
- d) Define the terms process and thread
- e) What is CPU burst cycle?
- f) Define critical section
- g) What is deadlock?
- h) Define swapping.
- i) What is fragmentation?
- j) Write the file operations.
- k) Define hash table.

PART – B

Answer any **THREE** questions. All questions carry equal marks. 3 x 16 = 48 M

2. a) Discuss an Operating-System Structure. 8 M
b) Explain about Operating-System Services. 8 M
3. a) Explain about First-Come-First-Served Scheduling. 8 M
b) Briefly Describe Round Robin Scheduling. 8 M
4. Discuss Banker's algorithm for dead lock avoidance. 16 M
5. a) Describe hashed page table. 8 M
b) Explain optimal page replacement algorithm. 8 M
6. a) Explain about indexed file allocation method. 8 M
b) Write short notes on SSTF disk scheduling. 8 M