

Code: EE6T6FE-D, CE6T6FE-C

III B.Tech - II Semester – Regular Examinations – May 2017

OPERATING SYSTEMS
(Common for CE & EEE)

Duration: 3 hours

Max. Marks: 70

PART – A

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

11x 2 = 22 M

1.

- a) Define multi-processor systems.
- b) What is the difference between a trap and an interrupt?
- c) What do you understand by process Management?
- d) Name the different process states that a process can be in.
- e) Which one of these can have the problem of starvation:
 - i) Shortest Job First
 - ii) Round Robin
- f) Define the structure of resource allocation graph.
- g) What do you understand by recovery from deadlock?
- h) Can paging be used to remove external fragmentation?
Justify.
- i) What is the cause of thrashing?
- j) Define FCFS disk scheduling.
- k) What are mkdir and chdir?

PART – B

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) What do you understand by the user's view and system's view of an operating system? 8 M
- b) Write a note on Process control. 8 M
3. Demonstrate Shortest-Job-First Scheduling, Priority Scheduling, Round-robin scheduling with examples. 16 M
4. What are Semaphores? Write about usage of semaphores and how they are implemented. 16 M
5. Describe about hierarchical paging and hashed page tables in details. 16 M
6. Elaborate C-SCAN and FCFS disk scheduling algorithms with examples. 16 M