

Code: IT3T5

II B.Tech - I Semester – Regular Examinations – December 2015

**OPERATING SYSTEMS CONCEPTS
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

PART – A

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

11x 2 = 22 M

1. a) Define operating System in user view.
- b) List any 4 special purpose systems.
- c) List different states for a process.
- d) Define Multi Threading.
- e) Explain about operations on processes.
- f) Define Critical Section.
- g) Explain concept of Deadlock with an Example.
- h) Define Paging.
- i) Define Swap space.
- j) Explain different Access methods for File system.
- k) List different allocation methods for implementing File systems.

PART – B

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

3 x 16 = 48 M

2. a) Explain Multiprocessor and Clustered systems.

8 M

- b) Explain the Computer system organization and structure. 8 M
3. a) Explain in detail about different Interprocess communication strategies. 10 M
- b) Mention and explain about various services provided by the operating system. 6 M
4. a) Explain Round Robin scheduling with an example. 8 M
- b) Explain Dining Philosophers problem solution using monitors. 8 M
5. a) Explain the basic method of Paging Technique and its Hardware support. 8 M
- b) Explain Bankers algorithm in detail. 8 M
6. a) Explain the file attributes and its operations. 8 M
- b) Explain LRU and Optimal Page replacement algorithms in detail. 8 M