

R09

Code No: 09A50507

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech III Year I Semester Examinations, May/June – 2013

Operating Systems
(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

1. What is an operating system? State and explain various types of operating systems. And also discuss about operating system services. [15]
2. Distinguish between process and thread. Explain clearly about process scheduling and thread scheduling. [15]
3. Discuss the need for process synchronization. State various classic problems of synchronization and explain the solution for any one of them. [15]
- 4.a) Distinguish between paging and segmentation.
b) State and explain any two page replacement algorithms with suitable examples. [15]
- 5.a) What is meant by deadlock? Discuss necessary conditions for happening deadlock.
b) Explain the Banker's algorithm for deadlock avoidance. [15]
- 6.a) State and explain various file access methods.
b) State and explain various free space management techniques in file system implementation. [15]
- 7.a) Explain the RAID structure.
b) Discuss about swap-space management give suitable example to it. [15]
8. Write short notes on the following:
a) Program threats
b) Disk structure.
c) System programs. [15]
