

**III B.Tech II Semester Supplementary Examinations,
November/December 2005
OPERATING SYSTEMS**

**(Common to Electronics & Communication Engineering and Electronics &
Instrumentation Engineering)**

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Mention the various registers and their functions under the following two categories.
 - (a) User-visible registers
 - (b) Control and status registers [8+8]
2. (a) Define the following
 - i. Process
 - ii. Program
 - iii. Process control block
 - iv. Process Scheduling

(b) Explain the process State Transition diagram with examples. [8+8]
3. What are the principles of concurrency and explain the execution of the concurrent process with a simple example. [6+6+4]
4. What are the principles of deadlock? And explain in detail the two categories of resources. [8+8]
5. (a) Define Memory Management.

(b) Explain in detail the requirements that memory management needs to satisfy [4+12]
6. (a) What are the criteria based on which scheduling policies are evaluated.

(b) Describe round robin and feedback scheduling policies. [8+8]
7. Write about
 - (a) Free space management
 - (b) Reliability of a file allocation [8+8]
8. (a) What are the various classes of intruders?

(b) Discuss about intrusion techniques. [8+8]
