

II B.Tech II Semester Supplementary Examinations, April/May 2005
OPERATING SYSTEMS

**(Common to Computer Science & Engineering, Information Technology
and Computer Science & Systems 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
2. Discuss the attributes of the process. Describe the typical elements of process control Block.
3. Explain in detail all the steps involved in getting a Dekker's algorithm.
4. How the deadlocks can be avoided? Explain with the help of necessary algorithms
5.
 - (a) Write short notes on Replacement Algorithm
 - (b) What is Relocation? Illustrate the concept of Relocation that Hardware has to support
 - (c) Describe the concept of Simple paging using illustrations
 - (d) Explain the steps involved in Address Translation
6. Write short notes of the following
 - (a) Random disk scheduling
 - (b) Priority disk scheduling
 - (c) Disk Cache
7.
 - (a) Explain in detail the four terms field, record, file and database with respect to files.
 - (b) List the objectives and the requirements for a file management system
8. Write short notes on
 - (a) Viruses
 - (b) Worms
 - (c) Logic bomb
 - (d) Trap door
