Code: 06MC202

MCA II Semester Supplementary Examinations, August 2010 OPERATING SYSTEMS

(For students admitted in 2006, 2007 & 2008 only)

Time: 3 hours Max Marks: 60

Answer any FIVE questions All questions carry equal marks

- 1. What the operating system services that provides functions helpful to the use? Explain.
- 2. (a) Define process. Draw the process state diagram and explain.
 - (b) Explain the criteria for evaluation of CPU scheduling algorithms.
- 3. Compare and contrast paging and segmentation.
- 4. (a) Explain in detail about tree-structured directories. What are its advantages and disadvantages?
 - (b) Discuss contiguous allocation method, mentioning its advantages and disadvantages.
- 5. What is a semaphore? Give the solution to the dining-philosophers problem using semaphores and explain.
- 6. What is deadlock? Explain Banker's algorithm for deadlock avoidance with an example.
- 7. (a) Explain how process management is done in Unix.
 - (b) Describe Unix File system.
- 8. (a) Mention the design principles of Linux system.
 - (b) Describe inter process communication in Linux.
