

Code : R7410407**R07****IV B.Tech I Semester (R07) Supplementary Examinations, May 2012****OPERATING SYSTEMS****(Electronics & Communication Engineering)****Time: 3 hours****Max Marks: 80****Answer any FIVE questions****All questions carry equal marks***********

1. (a) List and explain the various functions of operating systems.
(b) Draw and explain the memory hierarchy in detail.
2. (a) Give brief description about thread libraries.
(b) What is the use of PCB? Draw and explain the structure of it.
3. (a) Discuss in detail about the role of mutual exclusion.
(b) Explain in detail about the semaphores.
4. (a) Define a deadlock. Explain how to prevent from the deadlocks.
(b) Explain the various mechanisms to detect the deadlocks.
5. (a) What is swapping? Explain continuous memory allocation in detail.
(b) Write short notes on demand paging.
6. (a) Briefly describe about the three types of scheduling.
(b) Explain the disk scheduling policies in detail.
7. (a) What is a file? Explain the different techniques to access a file.
(b) Explain tow level and tree structured directories in detail.
8. (a) Define virus. Explain the stages of viruses and types of viruses in detail.
(b) Write short notes on password protection mechanism.
