

Subject Code: G0504/R13

M. Tech – I Semester Regular/Supplementary Examinations, April, 2015

**OPERATING SYSTEMS
(Common to CS and CS&E)**

Time: 3 Hours

Max Marks: 60

**Answer any FIVE questions
All questions carry EQUAL marks**

1. a) What is operating system? What are the goals of operating system? Explain about the services of operating system.
b) Explain about different types of operating systems.
2. a) Differentiate between process and thread? Explain about multiple processor scheduling.
b) Discuss about Round Robin scheduling with an example.
3. a) What is critical section problem? How to provide synchronization using monitors? Explain.
b) Explain about the necessary steps that can be done for deadlock prevention.
4. a) What is demand paging? Discuss.
b) Discuss about FIFO page replacement algorithm with an example.
5. a) Discuss about RAID structure.
b) What are bad blocks and boot blocks? Discuss.
6. a) Discuss about different access methods for accessing information from a file.
b) Explain about the storage structure and logical structures of a directory.
7. a) Discuss about I/O scheduling in kernel I/O subsystem.
b) Explain about the importance of Cryptography.
8. Explain about the following terms
 - a) Polling
 - b) Virtual memory
 - c) Denial Lock service
