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Total No. of Pages : 01

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**M.Tech.(IT)E1 (2015 & Onwards)/(CSE Engg.)EI-I (2015 to 2017)**  
**(Sem.-2)**

**ADVANCED OPERATING SYSTEM**

Subject Code : MTCS-205

M.Code : 72889

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1.
  - a. Explain the basic concepts of distributed Mutual Exclusion.
  - b. Write a short note on SUN Network File System.
2. What are deadlocks? How deadlock handling in distributed environment is different from conventional operating System?
3. Write a short note on following :
  - a. Lamport's Algorithm
  - b. Distributed shared memory
4.
  - a. Explain the implementation of RPC in a distributed system.
  - b. Explain various features of a good distributed file system.
5. Define following :
  - a. Markov Process
  - b. Voting Protocols
6.
  - a. Define failures in operating system. Explain the classification of failures.
  - b. What are fault tolerant issues? Discuss Nonblocking commit protocol.
7.
  - a. Classify the characteristics of Multiprocessor Systems.
  - b. Discuss the design and implementation issues of Multiprocessor Systems.
8.
  - a. Compare real time systems with traditional systems in terms of Task assignment and Scheduling.
  - b. Write a short note on Embedded Applications.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**

