

Roll No. ....

**23071**

**M. Tech. 2nd Semester (Computer  
Engg.) Examination – January, 2012**

**RESOURCE MANAGEMENT IN COMPUTER SYSTEMS**

**Paper : MTCE-604 - A**

***Time : Three hours ] [ Maximum Marks : 100***

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.*

**Note :** Attempt only *five* questions. All questions carry equal marks.

1. Define operating System. Explain the functions & services of operating systems. 20
  
2. What is a system calls ? Explain different types of system calls in operating systems. 20
  
3. Write short notes on :
  - (a) Virtual memory. 10
  - (b) Thread. 10

4. What is a deadlock ? Explain different deadlock handling mechanism. 20
5. What is Distributed Operating System ? Explain Architecture of distributed system. 20
6. Explain distributed file system. Also explain the mechanism for building distributed file system. 20
7. Explain :
- (a) Token Based algorithms. 10
  - (b) Logical clock. 10
8. (a) What is distributed mutual exclusion. 10
- (b) Explain access matrix model. 10
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