

Roll No.

23071

M.E./M. Tech. 2nd Semester (CSE)

Examination – June, 2013

**RESOURCE MANAGEMENT IN COMPUTER
SYSTEM**

Paper : MTCE-604A

Time : Three hours]

[Maximum Marks : 100

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

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

1. (a) What is an operating system and its functions ?
What are the features of a good operating system ?
10
- (b) What are the historical perspectives of operating systems ? Explain in detail. 10

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2. (a) What is thread ? Explain the types of threads with proper examples. 10
- (b) What is context switching ? Explain in detail with proper examples. 10
3. Explain the following with proper examples :
- (a) Deadlock detection, 10
- (b) Deadlock prevention. 10
4. What is Scheduling ? Describe the different types of scheduling with suitable examples. Which Scheduling technique is better than other & why ? 20
5. (a) What is Distributed Mutual Exclusion ? How is it achieved ? 10
- (b) What are the token and non-token based algorithms ? Explain in detail. 10
6. What is access matrix model ? Explain the different methods of implementation for access matrix model. Which method is better than other and why ? 20

7. Explain the concept of clocks with suitable examples :

(a) Lamport's Logical Clocks. 10

(b) Vector Clocks. 10

8. Write notes on :

(a) Take Grant Method, 10

(b) Bell La Padulla Method. 10

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