

23071

**M. Tech. 2nd Semester (CSE)
Examination – May, 2018**

RESOURCE MANAGEMENT IN COMPUTER SYSTEMS

Paper : MTCE-604-A

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 only *five* questions. All questions carry equal marks.

1. What is operating system and its function ? Also discuss various design issues of good operating system. <http://www.HaryanaPapers.com> 20
2. Differentiate between :
 - (a) Mutual Exclusion & Synchronization 10
 - (b) Prevention and avoidance 10

3. (a) Discuss various types of reusable and consumable resources. 10
- (b) Discuss various types of memory management scheduling algorithm. 10
4. Explain deadlock detection and avoidance algorithm with example. 20
5. What is distributed operating system ? Explain architecture of distributed system. 20
6. Discuss briefly distributed file system. Also explain mechanism for building distributed file system. 20
7. Discuss briefly different types of thread encounter to a computer system or a computer network. Explain access matrix model enforces a security policy in distributed system. Give the data structure used to implement this model by capability based addressing. 20

8. Explain the following :

20

- (a) Take-grant method
 - (b) Design issue of DFS
 - (c) Distributed mutual exclusion
 - (d) Case studies of linux and window operating system
-