



Reg. No. :

Name :

First Semester M.C.A. Degree (Reg./Supple./Imp.)**Examination, February 2015****MCA 1C 03 : OPERATING SYSTEMS****(2014 Admn.)**

Time : 3 Hours

Max. Marks : 80

SECTION – A

Note : Answer any ten questions. Each question carries three marks. (10×3=30)

1. What are the significant reasons for selecting distributed operating systems ?
2. What are the merits of Multiprogramming ?
3. What are the uses of system call to perform Input/Output tasks ?
4. Discuss the importance of File Management Services.
5. What are the uses of short term, medium term and long term scheduler ?
6. Define Kernel Thread.
7. What are the differences between logical and physical addresses ?
8. Why are segmentation and paging sometimes combined into one scheme ?
9. What are semaphores ?
10. What are the merits of virtual file system ?
11. Why is deadlock detection much more expensive in a distributed environment ?
12. What is the cause of thrashing and how it is overcome ?



SECTION – B

Note : Answer **all** questions. **Each** question carries **ten** marks. (5×10=50)

13. Discuss the major categories of operating system services.

OR

With suitable examples highlight the different types of "system calls".

14. Briefly explain the various types of scheduling algorithms employed in the present day operating systems.

OR

What are the possible exception conditions, which can occur in inter process communication ?

15. Explain the various multipartition memory allocation strategies commonly used.

OR

Compare and contrast the contiguous linked and indexed disk allocation strategies.

16. What is critical section problem, explain the algorithm that satisfies all the requirements of the critical section problem ?

OR

Describe the various methods for managing free disk space.

17. Describe the goals of protection, explain access matrix protection method briefly.

OR

Explain any three design issues of distributed operating systems.