

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-641043**

Master's Degree Examination-November 2017

I Semester

Class: I PG

Max.Marks:60

Major: M.Sc Computer Science

Time : 3 Hours

17MCSC03 Advanced Operating Systems

PART-A

10x ½=5

Choose the correct answer

1. The assignment of the CPU to the first process on the ready list is called _____.
a) Block b) Dispatching c) Wakeup d) None of these
2. In _____ our concern is to condition a system to remove any possibility of deadlocks occurring.
a) Deadlock Prevention b) Deadlock Avoidance
c) Deadlock Detection d) Deadlock Recovery
3. _____ Strategies are geared to obtaining the best possible use of the main storage resources.
a) Replacement b) Fetch c) Storage Management d) Placement
4. The waste of storage due to excessively large tables is called _____.
a) Internal Fragmentation b) Primary Storage
c) Segmentation d) Table Fragmentation
5. _____ Scheduling sometimes called job scheduling.
a) Low Level b) High Level c) Intermediate Level d) Processor Level
6. Increasing the number of buses in a shared bus-system to the number of storage units creates a multi processor organization called the _____.
a) Shared Bus b) Cross bar Switch Matrix c) Hypercube d) Multistage Network
7. Remote Procedure calls is _____.
a) A Single Thread b) A Single Process
c) Inter Process Communication d) None of these
8. A Distributed system is a collection of loosely coupled processor inter connected by a _____.
a) Distributed Network b) Communication network
c) Transfer Network c) None of these.
9. _____ System provide a friendly environment for program development and text Processing.
a) Unix b) Windows c) Linux d) Kernel
10. The _____ is open source operating system.
a) Linux b) Unix c) Ms Dos d) Windows

PART-B

Answer All Questions

5x4=20

Each answer should not exceed 200 words or one page.

11.(a) Explain Process State Transition in detail.

(or)

(b)What is mutual exclusion? Explain

12.(a) Explain Single user contiguous storage allocation .

(or)

(b)Explain Block Mapping

13.(a) What are priorities?Explain

(or)

(b) What are the functions of job schedules

14.(a) Explain client server model with neat diagram.

(or)

(b)Define processor allocation.

15.(a) What are the advantages of windows operating system

(or)

(b)Explain Real time operating system.

PART-C

Answer All Questions

5x7=35

Each answer should not exceed 600 words or three pages.

16.(a)Explain in detail about Interrupt Processing.

(or)

(b)Define Deadlock Prevention in detail.

17.(a)Write notes on Storage Management Strategies.

(or)

(b)Explain Page Replacement Strategies.

18.(a)Discuss about Preemptive vs Non Preemptive scheduling.

(or)

(b)Explain Multiprocessor operating system organization.

19.(a)Discuss the major design issues of distributed operating system.

(or)

(b)Write notes on Threads in Distributed operating system with neat diagram.

20.(a)Discuss about UNIX operating system.

(or)

(b)Write a note on mobile operating systems.