

CS6401- Operating System
QUESTION BANK
UNIT-V

Part-A**1. What is meant by Data Striping?**

Data Striping means splitting the bits of each byte across multiple disks .It is also called as Bit -level Striping.

2. What is meant by Boot Disk?

A Disk that has a boot partition is called as Boot Disk.

3. What are the Components of a Linux System?

Linux System composed of three main modules. They are:

(i).Kernel (ii).System libraries (iii).System utilities

4. What are the main supports for the Linux modules?

The Module support under Linux has three components. They are:

- (i). Module Management
- (ii).Driver Registration.
- (iii).Conflict Resolution mechanism.

5. What is meant by Process?

A Process is the basic context within which all user-requested activity is serviced within the Operating system.

6. What is meant by Process -ID?

Each process has a unique identifier. PID's are used to specify processes to the operating system when an application makes a system call to signal, modify or wait for another process.

7. What is meant by Personality?

Process Personalities are primarily used by emulation libraries to request that system call be compatible with certain versions of UNIX.

8. What is meant by Buffer cache?

It is the kernel's main cache for block-oriented devices such as disk drives and is the main mechanism through which I/O to these devices is performed.

9. What is the Disadvantage of Static Linking?

The main disadvantage of static linking is that every program generated must contain copies of exactly the same common system library functions.

10. What is meant by Kernel in Linux system?

Kernel is responsible for maintaining all the important abstractions of the operating system including such things as virtual memory and processes.

11. What is meant by System Libraries?

System Libraries define a standard set of functions through which applications can interact with the kernel and that implement much of the operating -system functionality that doesn't need the full privileges of kernel code.

12. What is meant by System Utilities?

System Utilities are system programs that perform individual, specialized management tasks. Some of the System utilities may be invoked just to initialize and configure some aspect of the system and others may run permanently, handling such tasks as responding to incoming network connections, accepting logon requests from terminals or updating log files.

13. What is the function of Module management?

The module management allows modules to be loaded into memory and to talk to the rest of the kernel.

14. What is the function of Driver registration?

Driver Registration allows modules to tell the rest of the kernel that a new driver has become available

15. What is the function of Conflict Resolution mechanism?

This mechanism allows different device drivers to reserve hardware resources and to protect those resources from accidental use by another driver.

16. What is meant by Device drivers?

Device drivers include (i) Character devices such as printers, terminals (ii) Block devices including all disk drives) and network interface devices.

Part-B

1. Explain in detail the design principles, kernel modules, process management, scheduling in LINUX system.
2. Explain in detail the memory management in LINUX system.
3. Explain in detail the file system in LINUX system.
4. Explain in detail about I/O in LINUX system.
5. Describe about the network structure of LINUX system.
6. Explain in detail about the system administration of LINUX system and the requirements for LINUX system administrator.
7. Explain in detail about setting up a LINUX multifunction server.
8. What is virtualization? Explain its concepts in detail.
9. Illustrate the procedure for setting XEN on LINUX host and adding guest OS.
10. Give the procedure for setting VMware on LINUX host and adding guest OS.