

1) Which of the following is not an operating system?

- a. Windows
 - b. Linux
 - c. Oracle
 - d. DOS
-

2) What is the maximum length of the filename in DOS?

- a. 4
 - b. 5
 - c. 8
 - d. 12
-

3) When was the first operating system developed?

- a. 1948
 - b. 1949
 - c. 1950
 - d. 1951
-

4) When were MS windows operating systems proposed?

- a. 1994

- b. 1990
 - c. 1992
 - d. 1985
-

5) Which of the following is the extension of Notepad?

- a. .txt
 - b. .xls
 - c. .ppt
 - d. .bmp
-

6) What else is a command interpreter called?

- a. prompt
 - b. kernel
 - c. shell
 - d. command
-

7) What is the full name of FAT?

- a. File attribute table
- b. File allocation table
- c. Font attribute table
- d. Format allocation table

8) BIOS is used?

- a. By operating system
- b. By compiler
- c. By interpreter
- d. By application software

9) What is the mean of the Booting in the operating system?

- a. Restarting computer
- b. Install the program
- c. To scan
- d. To turn off

10) When does page fault occur?

- a. The page is present in memory.
- b. The deadlock occurs.
- c. The page does not present in memory.
- d. The buffering occurs.

11) Banker's algorithm is used?

A deadlock in computing occurs when two or more processes are unable to proceed because each is waiting for the other to release a resource, resulting in a stalemate. In other words, each process holds a resource and is waiting for another resource that is currently held by another process, causing a circular waiting condition. As a result, none of the processes can continue execution, leading to a system deadlock. Deadlocks can occur in various computing environments, including operating systems, database systems, and distributed systems. They are undesirable because they can result in system downtime and a loss of productivity.

a. To prevent deadlock

b. To deadlock recovery

c. To solve the deadlock

d. None of these

12) When you delete a file in your computer, where does it go?

a. Recycle bin

b. Hard disk

c. Taskbar

d. None of these

13) Which is the Linux operating system?

a. Private operating system

b. Windows operating system

c. Open-source operating system

d. None of these

14) What is the full name of the DSM?

- a. Direct system module
- b. Direct system memory
- c. Demoralized system memory
- d. Distributed shared memory

DSM is Distributed Shared Memory.

It refers to the concept of a shared memory space across multiple computing nodes in a distributed system, allowing processes running on different nodes to access shared data as if it were in local memory.

15) What is the full name of the IDL?

- a. Interface definition language
- b. Interface direct language
- c. Interface data library
- d. None of these

"IDL" stands for Interface Definition Language. It's used for defining the interface between software components(classes, objects, functions, modules, frameworks,libraries) in distributed systems.

16) What is bootstrapping called?

Bootstrapping refers to the process of starting up a computer system, initializing its hardware components, loading the operating system into memory, and launching the necessary software components to make the system operational. This term originates from the phrase "pulling oneself up by one's bootstraps," which metaphorically means self-starting or self-sustaining.

The bootstrapping process typically involves the following steps:

1. Power-On Self-Test (POST): When the computer is turned on, the BIOS (Basic Input/Output System) or UEFI (Unified Extensible Firmware Interface) firmware performs a series of diagnostic tests on hardware components such as the CPU, memory, storage devices, and peripherals.
2. Bootstrap Loader: After the hardware has been initialized, the BIOS or UEFI firmware locates and loads a small program known as the bootstrap loader from a predetermined location (such as the Master Boot Record on a storage device). The bootstrap loader's primary task is to load the operating system kernel into memory.
3. Operating System Initialization: Once the bootstrap loader has loaded the operating system kernel into memory, the kernel takes control of the bootstrapping process. The kernel initializes system resources, establishes essential data structures, and sets up device drivers to interact with hardware components.
4. User Space Initialization: After the kernel has completed its initialization tasks, it starts the user-space initialization process. This involves launching system daemons, services, and user-level processes necessary for the system to become fully operational.
5. Login or Desktop Environment: Finally, the bootstrapping process may conclude with the presentation of a login prompt or the loading of a graphical desktop environment, depending on the system configuration and user preferences.

Overall, bootstrapping is a critical process that enables a computer system to transition from a powered-off state to a fully functional state, allowing users to interact with software applications and perform various tasks.

a. Cold boot

b. Cold hot boot

c. Cold hot strap

d. Hot boot

17) What is the fence register used for?

a. To disk protection

b. To CPU protection

c. To memory protection

d. None of these

The fence register, also known as a memory protection register, is primarily used for memory protection (option c). It's a hardware register that helps to define memory regions with specific access permissions such as read, write, or execute. These registers are used to prevent unauthorized access to certain memory regions, enhancing security and stability in computer systems.

18) If the page size increases, the internal fragmentation is also?

a. Decreases

b. Increases

c. Remains constant

d. None of these

internal fragmentation refers to the wasted memory within a memory block or page due to inefficient allocation.

It occurs when the allocated memory is larger than what is needed to store the data or execute a process.

Internal fragmentation primarily occurs in memory allocation schemes where memory is divided into fixed-size blocks or pages, such as paging or fixed partitioning.

Paging: In paging, the main memory is divided into fixed-size blocks called **pages**, and processes are allocated memory in whole page units. If a process requires memory that is less than a full page, the entire page is still allocated to the process, leading to internal fragmentation. The unused portion of the allocated page is wasted.

Fixed Partitioning: In fixed partitioning, the main memory is divided into fixed-size partitions, and processes are allocated memory from these partitions. If a process requires memory that is smaller than the size of the allocated partition, the

remaining portion of the partition remains unused, resulting in internal fragmentation.

19) Which of the following is a single-user operating system?

- a. Windows
 - b. MAC
 - c. Ms-Dos
 - d. None of these
-

20) The size of virtual memory is based on which of the following?

- a. CPU
 - b. RAM
 - c. Address bus
 - d. Data bus
-

21) If a page number is not found in the translation lookaside buffer, then it is known as a?

- a. Translation Lookaside Buffer miss
- b. Buffer miss
- c. Translation Lookaside Buffer hit
- d. All of the mentioned

if a page number is not found in the translation lookaside buffer (TLB), it is referred to as a "Translation Lookaside Buffer miss." This means that the TLB does not contain the translation for the desired page, and the translation must be retrieved from the page table in memory.

22) Which of the following is not application software?

- a. Windows 7
 - b. WordPad
 - c. Photoshop
 - d. MS-excel
-

23) Which of the following supports Windows 64 bit?

- a. Window XP
 - b. Window 2000
 - c. Window 1998
 - d. None of these
-

24) Which of the following windows does not have a start button?

- a. Windows 7
- b. Windows 8
- c. Windows XP

d. None of these

25) Which of the following operating systems does not support more than one program at a time?

- a. Linux
 - b. Windows
 - c. MAC
 - d. DOS
-

26) Which of the following is a condition that causes deadlock?

Sure, here's an explanation of each of these conditions in the context of deadlock:

Mutual Exclusion: Mutual exclusion is a condition where resources, such as a file or a device, can be accessed by only one process at a time. This means that if one process is currently using a resource, other processes must wait until the resource becomes available. Mutual exclusion can contribute to deadlock because if one process holds a resource and is waiting to acquire another resource that is held by another process, a deadlock situation can occur if the other process is also waiting for the resource held by the first process.

Hold and Wait: Hold and wait refers to a condition where a process holds at least one resource and is waiting to acquire additional resources that are currently held by other processes. This condition can lead to deadlock if processes acquire resources sequentially and hold onto them while waiting for other resources, creating a situation where each process is waiting for a resource held by another process.

Circular Wait: Circular wait occurs when a set of processes are each waiting for a resource that is held by another process in the set, forming a circular chain of dependencies. For example, Process A is waiting for a resource held by Process B, Process B is waiting for a resource held by Process C, and Process C is waiting for a resource held by Process A. This circular dependency can result in deadlock if no external intervention occurs to break the cycle.

No Preemption: Preemption refers to the ability to forcibly remove a resource from a process and allocate it to another process. In the context of deadlock, if resources cannot be preempted from processes, a deadlock situation may arise. This is because if a process holding a resource is waiting for another resource that is held by a different process, and neither process can release its resource voluntarily, deadlock can occur.

- a. Mutual exclusion
 - b. Hold and wait
 - c. Circular wait
 - d. No preemption
 - e. All of these
-

27) Who provides the interface to access the services of the operating system?

- a. API
 - b. System call
 - c. Library
 - d. Assembly instruction
-

28) Where are placed the list of processes that are prepared to be executed and waiting?

- a. Job queue

b. Ready queue

c. Execution queue

d. Process queue

Here's a brief explanation of each:

1. Job Queue: The job queue is a queue that contains all the processes in the system, whether they are waiting to be executed or currently executing. It represents the set of all processes that have been submitted to the system for execution. Processes in the job queue may be waiting for their turn to be admitted into the system, or they may be in various states of execution.

2. Ready Queue: The ready queue is a queue that contains all the processes that are ready and waiting for execution by the CPU. These processes have all the necessary resources allocated to them and are waiting for CPU time to run. Typically, the operating system's scheduler selects processes from the ready queue for execution based on scheduling algorithms and priorities.

3. Execution Queue: The execution queue is not a standard term in operating systems. However, it could refer to a queue or list of processes that are currently being executed by the CPU. Once a process is selected from the ready queue by the scheduler, it is moved to the execution queue where its instructions are executed by the CPU.

4. Process Queue: The process queue is a generic term that can refer to any queue or list used by the operating system to manage processes. It may encompass various queues such as the job queue, ready queue, and other queues related to process scheduling, synchronization, or resource management. The term "process queue" is often used interchangeably with other queue terms in the context of operating systems.

29) Who among the following can block the running process?

a. Fork

b. Read

c. Down

d. All of these

30) Which of the following does not interrupt the running process?

- a. Timer interrupt
- b. Device
- c. Power failure

d. Scheduler process

In operating systems, semaphores are used as a synchronization mechanism to control access to shared resources among concurrent processes or threads. They help in preventing race conditions and ensuring that critical sections of code are executed in a mutually exclusive manner. Semaphores were introduced by Edsger W. Dijkstra in 1965 as part of his work on concurrent programming.

There are two main types of semaphores:

1. Binary Semaphore: Also known as mutex (mutual exclusion) semaphores, binary semaphores can have only two states: 0 and 1. They are typically used to provide mutual exclusion, allowing only one process or thread to access a resource at a time. Binary semaphores are often used to implement locks.
2. Counting Semaphore: Counting semaphores can have an integer value greater than or equal to zero. They are used to control access to a pool of identical resources, allowing multiple processes or threads to access the resource up to a certain limit. Counting semaphores are used for tasks like resource allocation, where a fixed number of resources are available.

The two primary operations associated with semaphores are:

- Wait (P) Operation (Down Operation): Decrements the semaphore value. If the value becomes negative, the process/thread executing the wait operation is blocked until the semaphore value becomes positive.
- Signal (V) Operation (Up Operation): Increments the semaphore value. If there are processes/threads blocked on the semaphore, one of them is unblocked.

Semaphores can be used to solve various synchronization problems in operating systems, such as producer-consumer problem, reader-writer problem, and dining philosophers problem. They provide a flexible and powerful mechanism for coordinating access to shared resources in multi-process or multi-threaded environments.

31) What is Microsoft window?

- a. **Operating system**
 - b. Graphics program
 - c. Word Processing
 - d. Database program
-

32) Which of the following is group of programs?

- a. **Accessories**
 - b. Paint
 - c. Word
 - d. **All of above**
-

33) Which of the following is an example of a Real Time Operating System?

- a. **MAC**
- b. MS-DOS
- c. Windows 10

d. Process Control

34) Which of the following operating systems do you use for a client-server network?

a. MAC

b. Linux

c. Windows XP

d. Windows 2000

35) Which windows was introduced to My Computer?

a. Windows 10

b. Windows XP

c. Windows 95

d. Windows 98

36) What type of commands are required to perform various tasks in DOS?

a. Internal commands

b. External commands

c. Valuable commands

d. Primary commands

37) What is the number of characters contained in the primary name of the file of MS-DOS?

- a. Up to 8 characters
 - b. 3 characters
 - c. Up to 10 characters
 - d. None of the above
-

38) Which command is used to fetch a group (.doc) of files that have just been deleted?

- a. Undelete
 - b. Undelete/all
 - c. Undelete *.doc
 - d. All of above
-

39) Which of the following is system software?

- a. Operating system
 - b. Compiler
 - c. Utilities
 - d. All of the above
-

40) Which program runs first after booting the computer and loading the GUI?

- a. Desktop Manager

- b. File Manager
- c. Windows Explorer
- d. Authentication

) What is the use of directory structure in the operating system?

- a. The directory structure is used to solve the problem of the network connection in OS.
 - b. It is used to store folders and files hierarchically.
 - c. It is used to store the program in file format.
 - d. All of the these
-

2) What type of scheduling is round-robin scheduling?

- a. Linear data scheduling
 - b. Non-linear data scheduling
 - c. Preemptive scheduling
 - d. Non-preemptive scheduling
-

3) Which conditions must be satisfied to solve a critical section problem?

- a. Bounded Waiting
- b. Progress

c. Mutual Exclusion

d. All of these.

4) Which of the following options is correct about the windows operating system?

a. Windows is a CUI operating system.

b. Windows is based on CUI (Character User Interface)

c. Windows is a GUI operating system.

d. None of the these

5) Which of the following file systems is supported by the windows OS?

a. NTFS

b. FAT32

c. exFAT

d. All of the these

NTFS (New Technology File System): NTFS is the default file system for the Windows NT operating system family. It provides features such as file permissions, encryption, compression, and support for large file sizes and volumes.

FAT32 (File Allocation Table 32): FAT32 is an older file system commonly used in Windows operating systems prior to Windows XP. It supports smaller file sizes and volumes compared to NTFS and lacks some advanced features like file permissions and encryption.

exFAT (Extended File Allocation Table): exFAT is a file system introduced by Microsoft to overcome the limitations of FAT32, particularly in terms of file size and volume size. It is optimized for flash drives and other external storage devices, offering better performance and support for larger files and volumes compared to FAT32.

6) Which of the following keys does the user use to switch between applications running simultaneously in the Windows operating system?

- a. FN + TAB not a standard keyboard shortcut
 - b. ALT + TAB
 - c. CTRL + TAB within applications to switch between tabs or documents within that application.
 - d. SHIFT + TAB not standard
-

7) Which of the following commands creates an emergency repair disk for Windows NT 4.0?

- a. BAT - batch file
 - b. EXE
 - c. EXE/S executable file – stand alone
 - d. ADD/REMOVE program - allows users to install, uninstall, manage s/w applns.
-

8) Which of the following scheduling algorithms is preemptive scheduling?

- a. FCFS Scheduling
- b. SJF Scheduling
- c. Network Scheduling
- d. SRTF Scheduling

Algorithms based on preemptive scheduling are Round Robin (RR), Shortest Remaining Time First (SRTF), Priority (preemptive version), etc.

Algorithms based on non-preemptive scheduling are: Shortest Job First (SJF basically non preemptive) and Priority (nonpreemptive version), etc.

9) How can you get a printout of the system configuration on windows 9x OS?

- a. Open the CMD window, type "MSDN", and press <printscrn>
- b. From the device manager, click the print button
- c. Open the CMD window, type "SYS", and press <printscrn>
- d. None of the these

10) Which of the following operating system runs on the server?

- a. Batch OS
- b. Distributed OS
- c. Real-time OS
- d. Network OS

11) What type of memory stores data in a swap file on a hard drive?

- a. Secondary memory
- b. Virtual memory
- c. Low memory
- d. RAM

12) Which of the following "semaphore" can take the non-negative integer values?

- a. Binary Semaphore

- b. Counting Semaphore
 - c. Real Semaphore
 - d. All of the these
-

13) In which directory the local user profile settings are stored by default in windows 2000?

- a. C: \ USERS
 - b. C: \ NETLOGON
 - c. C: \ WIN NTUSER.DAT
 - d. C: \ Documents and settings
-

14) Which of the following operating system does not require a command to run?

- a. Kali Linux
 - b. Windows
 - c. Unix
 - d. All of the these
-

15) Which method is the best among file allocation methods?

- a. Linked
- b. Contiguous
- c. Indexed

d. None of the these

16) The operating system work between

a. User and Computer

b. Network and User

c. One user to another user

d. All of the these

17) What is the paging in the operating system?

a. Memory management scheme

b. Network management scheme

c. Internet management scheme

d. None of the these

18) Which of the following programs is loaded first when starting a computer?

a. Window desktop

b. Network connection program

c. Operating system

d. CMD

19) Which of the following backup methods is quickest and requires the least amount of backup space?

- a. Complete backups
 - b. Incremental
 - c. Differential
 - d. None of the these
-

20) Which of the following is not a type of directory structure?

- a. Acyclic-graph directory structure
 - b. Single-level directory structure
 - c. Tree directory structure
 - d. Stack directory structure
-

21) Which of the following scheduling algorithm is non-preemptive scheduling?

- a. SJF scheduling
 - b. Round-Robin scheduling
 - c. SRTF scheduling
 - d. None of these.
-

22) Which of the following scheduling reduces process flow time?

- a. FCFS

b. LIFO

c. SJF

d. All of the these

23) Consider the following three processes in the FCFS.

Process ID.	Brust-time.	Arrival-time
P1	3	3
P2	6	6
P3	9	9

What is the average waiting time?

a. 2

b. 3

c. 4

d. 5

24) How many types of buffer overflow in the operating system?

a. Two

b. Six

c. Seven

d. Five

25) In which allocation method does the user size the file before creating the file?

- a. Contiguous
 - b. Linked
 - c. Indexed
 - d. None of the these
-

26) Which of the following algorithms is used to avoid deadlock?

- a. Dynamic Programming algorithm
 - b. Primality algorithms
 - c. Banker's algorithm
 - d. Deadlock algorithm
-

27) Which of the following component does not belong to PCB (Process Control Block)?

- a. CPU registers
- b. CPU scheduling information
- c. Operating System information
- d. Accounting information

28) Which of the following method is used to improve the main memory utilization?

- a. Swapping
- b. Operating system
- c. Memory stack

d. None of these.

29) Buffer is a _____.

- a. Permanent area
 - b. Temporary area
 - c. Small area
 - d. Large area
-

30) Which of the following operating systems supports only real-time applications?

- a. Batch OS
 - b. Distributed OS
 - c. Real-time OS
 - d. Network OS
-

31) Which of the following binary formats support the Linux operating system?

- a. 0 and 1
 - b. Binary Number Format
 - c. ELF Binary Format
 - d. None of the these
-

32) What is Kali Linux?

- a. Network device
 - b. Operating system
 - c. Server name
 - d. Computer name
-

33) Which of the following statement is correct about fragmentation?

- a. It is software that connects the OS.
 - b. It is part of the software.
 - c. Loss the memory
 - d. All of the these
-

34) SSTF stands for _____.

- a. Shortest Signal Time First
 - b. Shortest Seek Time First
 - c. System Seek Time First
 - d. System Shortest Time First
-

35) The PCB is identified by _____.

- a. Real-Number
- b. Binary Number

- c. Store block
 - d. Integer Process ID
-

36) Which of the following method is used to prevent threads or processes from accessing a single resource?

- a. PCB
 - b. Semaphore
 - c. Job Scheduler
 - d. Non-Contiguous Memory Allocation
-

37) Which of the following mechanisms is a locking mechanism?

- a. Semaphore
 - b. PCB
 - c. Mutex
 - d. Binary Semaphore
-

38) Which of the following statements is correct about virtual memory?

- a. It is a combination of the logical-memory and physical-memory
- b. It is a separation of user logical memory and physical memory
- c. It is a virtual network memory
- d. None of the these

39) COW stands for _____

- a. Compress of write memory
- b. Copy overwrite
- c. Compress overwrites
- d. Computer of world

40) Who is responsible for keeping the process from the program?

- a. Operating system
- b. CPU
- c. Monitor
- d. All of the these

41) Which of the following operating systems require a command to run?

- a. Kali Linux
- b. Windows
- c. Mac OS
- d. Single-user operating system

1. What is an operating system?
 - a) interface between the hardware and application programs
 - b) collection of programs that manages hardware resources
 - c) system service provider to the application programs
 - d) all of the mentioned
2. What is the main function of the command interpreter?
 - a) to provide the interface between the API and application program
 - b) to handle the files in the operating system
 - c) to get and execute the next user-specified command
 - d) none of the mentioned
3. In Operating Systems, which of the following is/are CPU scheduling algorithms?
 - a) Priority
 - b) Round Robin
 - c) Shortest Job First
 - d) All of the mentioned
4. To access the services of the operating system, the interface is provided by the _____
 - a) Library
 - b) System calls
 - c) Assembly instructions
 - d) API
5. CPU scheduling is the basis of _____
 - a) multiprogramming operating systems
 - b) larger memory sized systems
 - c) multiprocessor systems
 - d) none of the mentioned
- advertisement
6. Which one of the following is not true?
 - a) kernel remains in the memory during the entire computer session
 - b) kernel is made of various modules which can not be loaded in running operating system
 - c) kernel is the first part of the operating system to load into memory during booting
 - d) kernel is the program that constitutes the central core of the operating system
7. Which one of the following errors will be handle by the operating system?
 - a) lack of paper in printer
 - b) connection failure in the network
 - c) power failure
 - d) all of the mentioned
8. Where is the operating system placed in the memory?
 - a) either low or high memory (depending on the location of interrupt vector)
 - b) in the low memory
 - c) in the high memory
 - d) none of the mentioned
9. If a process fails, most operating system write the error information to a _____
 - a) new file
 - b) another running process

- c) log file
- d) none of the mentioned

10. Which one of the following is not a real time operating system?

- a) RTLinux
- b) Palm OS
- c) QNX
- d) VxWorks

11. What does OS X has?

- a) monolithic kernel with modules
- b) microkernel
- c) monolithic kernel
- d) hybrid kernel

12. In operating system, each process has its own _____

- a) open files
- b) pending alarms, signals, and signal handlers
- c) address space and global variables
- d) all of the mentioned

13. In a timeshare operating system, when the time slot assigned to a process is completed, the process switches from the current state to?

- a) Suspended state
- b) Terminated state
- c) Ready state
- d) Blocked state

14. Cascading termination refers to the termination of all child processes if the parent process terminates _____

- a) Normally or abnormally
- b) Abnormally
- c) Normally
- d) None of the mentioned

15. When a process is in a "Blocked" state waiting for some I/O service. When the service is completed, it goes to the _____

- a) Terminated state
- b) Suspended state
- c) Running state
- d) Ready state

16. Transient operating system code is a code that _____

- a) stays in the memory always
- b) never enters the memory space
- c) comes and goes as needed
- d) is not easily accessible

17. The portion of the process scheduler in an operating system that dispatches processes is concerned with _____

- a) assigning ready processes to waiting queue
- b) assigning running processes to blocked queue

- c) assigning ready processes to CPU
- d) all of the mentioned

18. The FCFS algorithm is particularly troublesome for _____

- a) operating systems
- b) multiprocessor systems
- c) time sharing systems
- d) multiprogramming systems

19. For an effective operating system, when to check for deadlock?

- a) every time a resource request is made at fixed time intervals
- b) at fixed time intervals
- c) every time a resource request is made
- d) none of the mentioned

20. A deadlock avoidance algorithm dynamically examines the _____ to ensure that a circular wait condition can never exist.

- a) operating system
- b) resources
- c) system storage state
- d) resource allocation state

21. Swapping _____ be done when a process has pending I/O, or has to execute I/O operations only into operating system buffers.

- a) must never
- b) maybe
- c) can
- d) must

22. The main memory accommodates _____

- a) cpu
- b) user processes
- c) operating system
- d) all of the mentioned

23. The operating system is responsible for?

- a) bad-block recovery
- b) booting from disk
- c) disk initialization
- d) all of the mentioned

24. The operating system and the other processes are protected from being modified by an already running process because _____

- a) every address generated by the CPU is being checked against the relocation and limit registers
- b) they have a protection algorithm
- c) they are in different memory spaces
- d) they are in different logical addresses

25. Using transient code, _____ the size of the operating system during program execution.

- a) maintains
- b) changes
- c) increases

d) decreases

26. The operating system maintains a _____ table that keeps track of how many frames have been allocated, how many are there, and how many are available.

- a) memory
- b) mapping
- c) page
- d) frame

27. To obtain better memory utilization, dynamic loading is used. With dynamic loading, a routine is not loaded until it is called. For implementing dynamic loading _____

- a) special support from operating system is essential
- b) special support from hardware is required
- c) user programs can implement dynamic loading without any special support from hardware or operating system
- d) special support from both hardware and operating system is essential

28. The _____ presents a uniform device-access interface to the I/O subsystem, much as system calls provide a standard interface between the application and the operating system.

- a) Device drivers
- b) I/O systems
- c) Devices
- d) Buses

29. In real time operating system _____

- a) process scheduling can be done only once
- b) all processes have the same priority
- c) kernel is not required
- d) a task must be serviced by its deadline period

30. Hard real time operating system has _____ jitter than a soft real time operating system.

- a) equal
- b) more
- c) less
- d) none of the mentioned

31. For real time operating systems, interrupt latency should be _____

- a) zero
- b) minimal
- c) maximum
- d) dependent on the scheduling

32. Which one of the following is a real time operating system?

- a) Windows CE
- b) RTLinux
- c) VxWorks
- d) All of the mentioned

33. The priority of a process will _____ if the scheduler assigns it a static priority.

- a) depends on the operating system
- b) change

- c) remain unchanged
- d) none of the mentioned

34. What are the characteristics of Host based IDS?

- a) Logs are analysed to detect tails of intrusion
- b) The host operating system logs in the audit information
- c) Logs includes logins, file opens, and program executions
- d) All of the mentioned

35. What are the characteristics of stack based IDS?

- a) It is programmed to interpret a certain series of packets
- b) It models the normal usage of the network as a noise characterization
- c) They are integrated closely with the TCP/IP stack and watch packets
- d) The host operating system logs in the audit information

36. If the sum of the working – set sizes increases, exceeding the total number of available frames

- a) the operating system selects a process to suspend
- b) the system crashes
- c) then the process crashes
- d) the memory overflows

37. The information about all files is kept in _____

- a) operating system
- b) separate directory structure
- c) swap space
- d) none of the mentioned

38. The operating system keeps a small table containing information about all open files called

- a) file table
- b) directory table
- c) open-file table
- d) system table

39. What will happen in the single level directory?

- a) All files are contained in the same directory
- b) All files are contained in different directories all at the same level
- c) Depends on the operating system
- d) None of the mentioned

40. The operating system _____ the links when traversing directory trees, to preserve the acyclic structure of the system.

- a) deletes
- b) considers
- c) ignores
- d) none of the mentioned

41. To recover from failures in the network operations _____ information may be maintained.

- a) operating system
- b) ip address

- c) stateless
- d) state

42. On systems where there are multiple operating system, the decision to load a particular one is done by _____

- a) process control block
- b) file control block
- c) boot loader
- d) bootstrap

43. Whenever a process needs I/O to or from a disk it issues a _____

- a) system call to the operating system
- b) a special procedure
- c) system call to the CPU
- d) all of the mentioned

44. The two steps the operating system takes to use a disk to hold its files are _____ and _____

- a) caching & logical formatting
- b) logical formatting & swap space creation
- c) swap space creation & caching
- d) partitioning & logical formatting

45. The _____ program initializes all aspects of the system, from CPU registers to device controllers and the contents of main memory, and then starts the operating system.

- a) bootstrap
- b) main
- c) bootloader
- d) rom

46. In SCSI disks used in high end PCs, the controller maintains a list of _____ on the disk. The disk is initialized during _____ formatting which sets aside spare sectors not visible to the operating system.

- a) destroyed blocks, partitioning
- b) bad blocks, low level formatting
- c) destroyed blocks, high level formatting
- d) bad blocks, partitioning

47. Which principle states that programs, users, and even the systems be given just enough privileges to perform their task?

- a) principle of least privilege
- b) principle of process scheduling
- c) principle of operating system
- d) none of the mentioned

48. Network operating system runs on _____

- a) every system in the network
- b) server
- c) both server and every system in the network
- d) none of the mentioned

49. What are the types of distributed operating systems?

- a) Zone based Operating system
- b) Level based Operating system
- c) Network Operating system
- d) All of the mentioned

50. In Unix, which system call creates the new process?

- a) create
- b) fork
- c) new
- d) none of the mentioned