

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 1 of 120 4 Marks

Next Question

When a page fault occurs, the operating system:

- ☐ Displays an error message
- ☐ Halts the process
- ☐ Swaps the page from disk to memory
- ☒ Terminates the process

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1













Question No. 2 of 120 4 Marks



Next Question

What is a system call?

- ☐ A memory management technique
- ☒ A request made by a program to the kernel
- ☐ An interrupt triggered by hardware
- ☐ A user-space function

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

«

1

2

3

4

5

»



Question No. 3 of 120 4 Marks

Next Question

Which page replacement algorithm has the lowest page fault rate?

- ☒ Optimal Page Replacement
- ☐ Round Robin
- ☐ LRU (Least Recently Used)
- ☐ FIFO (First-In, First-Out)

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 4 of 120 4 Marks

Next Question

Which of the following methods is most commonly used for file system implementation?

☐ Contiguous allocation

☐ Indexed allocation

☐ Linked allocation

☒ Hierarchical allocation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 5 of 120 4 Marks

Next Question

In paging, the page size is:

- ☐ Fixed for each process
- ☐ Always 4 KB
- ☒ Determined by the operating system
- ☐ Determined by the processor

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 6 of 120 4 Marks

Next Question

Which page replacement algorithm replaces the page that has been used least recently?

- ☒ LRU (Least Recently Used)
- ☐ Round Robin
- ☐ FIFO (First In, First Out)
- ☐ LFU (Least Frequently Used)

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 7 of 120 4 Marks

Next Question

Which of the following can lead to excessive page faults?

☒ Page table corruption

☐ Inadequate physical memory

☐ Incorrect implementation of virtual memory

☐ Lack of hardware support for paging

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 8 of 120 4 Marks

Next Question

In file systems, what is the role of inodes?

☐ They store the actual data of files

☐ They store directories

☐ They are only used for system files

☒ They store metadata about files

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 9 of 120 4 Marks

Next Question

Which file system supports journaling, which helps recover from system crashes?

- ☐ FAT32
- ☐ ISO9660
- ☒ NTFS
- ☐ Ext2

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 10 of 120 4 Marks

Next Question

Which of the following issues can paging cause if not properly managed?

☒ Page fault

☐ Buffer overflow

☐ Race condition

☐ Deadlock

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 11 of 120 4 Marks

Next Question

Which of the following statements about condition variables is true?

- ☐ They are a type of mutex
- ☐ They prevent deadlocks
- ☐ They are used for mutual exclusion
- ☒ They are used for signaling between threads

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 12 of 120 4 Marks

Next Question

In a priority scheduling algorithm, if a process arrives with higher priority, the running process is preempted. What is this known as?

☐ First-Come, First-Served Scheduling

☒ Preemptive Scheduling

☐ Priority Inversion

☐ Priority Boost

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 13 of 120 4 Marks

Next Question

Which of the following describes 'Paging' in an operating system?

- ☐ It is a deadlock prevention mechanism.
- ☐ It refers to segmenting programs for better efficiency.
- ☒ It is a memory management scheme that eliminates the need for contiguous allocation of physical memory.
- ☐ It refers to swapping data between RAM and hard disk.

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 14 of 120 4 Marks

Next Question

Which of the following can minimize the effects of thrashing?

☒ Using a better page replacement algorithm

☐ Increasing the time quantum

☐ Reducing the size of the page table

☐ Increasing the degree of multiprogramming

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 15 of 120 4 Marks

Next Question

How can deadlocks be resolved if detected?

- ☐ Reduce the priority of the highest-priority process
- ☒ Use a different scheduling algorithm
- ☐ Kill one or more processes
- ☐ Increase memory size

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 16 of 120 4 Marks

Next Question

In a multithreaded program, which of the following can prevent a race condition?

- ☒ Reducing the number of threads
- ☐ Avoiding synchronization
- ☐ Using semaphores
- ☐ Increasing memory size

Next Question Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 17 of 120 4 Marks

Next Question

What happens when a program attempts to access a page that is not currently in memory?

- ☐ The operating system halts the process.
- ☐ The system crashes.
- ☐ A page fault is triggered.
- ☒ A segmentation fault occurs.

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1

- «
- 15
- 16
- 17
- 18
- 19
- 20
- »

Question No. 18 of 120 4 Marks

Next Question

What is thrashing in operating systems?

- ☐ When all processes are in the running state
- ☒ A situation when the system spends more time swapping pages in and out of memory than executing processes
- ☐ When the CPU remains idle
- ☐ When all pages of a program fit in the memory

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 19 of 120 4 Marks

Next Question

Which of the following conditions must hold to prevent race conditions?

☐ Hold and Wait

☐ Circular Wait

☐ None of the above

☒ Mutual Exclusion

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 20 of 120 4 Marks

Next Question

Which of the following describes a 'critical section' in an operating system?

- ☐ A section of memory allocated to processes
- ☐ A section of code where only one thread can execute at a time
- ☒ A section of code where multiple threads can access shared resources simultaneously
- ☐ A section of code executed by the kernel

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 21 of 120 4 Marks

Next Question

Which of the following mechanisms can help avoid deadlocks in an OS?

☐ Circular Wait

☒ Preemption

☐ Hold and Wait

☐ Thrashing

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 22 of 120 4 Marks

Next Question

A semaphore with a count of 1 is known as a:

☐ Counting Semaphore

☐ Condition Variable

☒ Binary Semaphore

☐ Mutex

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1

- «
- 20
- 21
- 22
- 23
- 24
- 25
- »

Question No. 23 of 120 4 Marks

Next Question

Which algorithm can detect deadlocks?

- ☐ FIFO scheduling
- ☐ LRU page replacement
- ☒ Banker's algorithm
- ☐ Round Robin scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 24 of 120 4 Marks

🔍 Next Question

Which of the following is true for a mutex?

☐ Only one process can access the critical section at a time

☒ Multiple processes can access the critical section at a time

☐ Mutexes are not related to synchronization

☐ Mutexes do not work in multi-core systems

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 25 of 120 4 Marks

Next Question

What type of file system typically offers the best performance for large files?

☐ Contiguous allocation

☒ Hierarchical allocation

☐ Linked allocation

☐ Indexed allocation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 26 of 120 4 Marks

Next Question

What is a monitor in operating systems?

- ☐ A virtual memory feature
- ☐ A hardware device
- ☒ A synchronization construct that allows safe access to shared resources
- ☐ A paging algorithm

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 27 of 120 4 Marks

Next Question

In which of the following scenarios is deadlock detection most important?

- ☐ When time-sharing systems are used
- ☐ When processes do not request resources
- ☐ When there are no mutual exclusion constraints
- ☒ When multiple processes share limited resources

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 28 of 120 4 Marks

Next Question

What is the main difference between semaphores and mutexes?

- ☒ Mutexes are for multiple processes, while semaphores are for threads
- ☐ Semaphores are binary, while mutexes allow counting
- ☐ Semaphores can only be used with hardware interrupts
- ☐ Semaphores can allow more than one thread in a critical section

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 29 of 120 4 Marks

Next Question

What is a condition variable used for in operating systems?

☒ To help coordinate the execution of multiple threads

☐ To detect race conditions

☐ To prevent deadlocks

☐ To handle page faults

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 30 of 120 4 Marks

Next Question

How are deadlocks prevented in operating systems?

☒ By ensuring circular wait does not occur

☐ By using Round Robin scheduling

☐ By increasing the time quantum

☐ By allowing mutual exclusion

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 31 of 120 4 Marks

Next Question

Which OS is designed to handle a large volume of work through a single job?

☐ Distributed OS

☒ Batch OS

☐ Real-Time OS

☐ Time-Sharing OS

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 32 of 120 4 Marks

Next Question

Which of these is an example of a Distributed Operating System?

☐ Plan 9

☐ MacOS

☒ MS-DOS

☐ Windows 10

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 33 of 120 4 Marks

Next Question

Which command in UNIX is used to terminate a process by its process ID?

☐ ps

☐ shutdown

☒ kill

☐ init

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 34 of 120 4 Marks

Next Question

In a deadlock situation, processes are:

☒ Waiting for resources held by each other

☐ Able to run concurrently

☐ Able to allocate more resources

☐ Operating without contention

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 35 of 120 4 Marks

Next Question

Which type of OS is focused on resource-sharing among geographically distributed systems?

☒ Distributed OS

☐ Batch OS

☐ Real-Time OS

☐ Time-Sharing OS

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 36 of 120 4 Marks

Next Question

In a real-time operating system, what is the most critical feature?

☐ Predictability

☒ Throughput

☐ Multi-tasking

☐ Efficiency

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 37 of 120 4 Marks

Next Question

What is the process of creating a process called in an operating system?

☒ Process creation

☐ Process spawning

☐ Process termination

☐ Process loading

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 38 of 120 4 Marks

Next Question

Which of the following is a necessary condition for deadlock?

☐ Circular wait

☐ Mutual exclusion

☒ All of the above

☐ Hold and wait

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 39 of 120 4 Marks

Next Question

What is a primary use case of a Batch Operating System?

- ☐ Online shopping
- ☐ Payroll processing
- ☒ Gaming
- ☐ Real-time banking transactions

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 40 of 120 4 Marks

Next Question

Which of the following is a feature of a Real-Time Operating System (RTOS)?

☐ Designed for multitasking and interactive tasks

☐ Resource management is its primary function

☒ Handles processes in predefined timing constraints

☐ Best suited for cloud computing environments

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 41 of 120 4 Marks

Next Question

Which technique can resolve race conditions in concurrent programming?

- ☒ Monitors
- ☐ Virtual memory
- ☐ Deadlocks
- ☐ Paging

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 42 of 120 4 Marks

Next Question

Which type of operating system allows multiple users to interact with the system at the same time?

☐ Real-Time OS

☒ Multi-User OS

☐ Single-User OS

☐ Batch OS

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 43 of 120 4 Marks

Next Question

In a multi-level feedback queue, processes can move between queues based on:

- ☒ All of the above
- ☐ Execution history
- ☐ Age of the process
- ☐ Priority

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 44 of 120 4 Marks

Next Question

Which operating system is designed for real-time processing?

☐ Time-Sharing Operating System

☒ Real-Time Operating System

☐ Distributed Operating System

☐ Batch Operating System

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 45 of 120 4 Marks

Next Question

You have a multi-threaded application and notice a race condition when accessing a shared variable. What technique could prevent this?

☐ File locks

☒ Semaphores

☐ Paging

☐ Non-preemptive scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 46 of 120 4 Marks

Next Question

Which is a possible result of improper multithreading?

☐ Segmentation fault

☐ Buffer Overflow

☐ Deadlock

☒ Thrashing

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 47 of 120 4 Marks

Next Question

What is a race condition in multithreading?

- ☐ When a thread terminates unexpectedly
- ☒ When multiple threads compete for resources and overwrite each other's results
- ☐ When a thread is indefinitely delayed due to lack of resources
- ☐ When all threads run at the same time

Next Question

Clear Answer

⚠ Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 48 of 120 4 Marks

🔍 Next Question

Which of the following is not a type of operating system?

☐ Time-Sharing Operating System

☒ Single-Tasking Operating System

☐ Batch Operating System

☐ Real-Time Operating System

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 49 of 120 4 Marks

Next Question

What is the key characteristic of a Time-Sharing Operating System?

☒ High throughput

☐ Single-user

☐ Interactive usage

☐ Real-time response

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

<

47

48

49

50

51

52

>



Question No. 50 of 120 4 Marks

Next Question

In preemptive scheduling, a running process can be interrupted:

- ☐ Only after the current task finishes
- ☐ When the time quantum expires
- ☒ A and C
- ☐ When a higher-priority process arrives

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 51 of 120 4 Marks

Next Question

Which system call is used to create a new process in UNIX?

☐ init()

☐ create()

☐ fork()

☒ exec()

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 52 of 120 4 Marks

Next Question

Which scheduling technique allows a process to be pre-empted and moved to the ready queue?

☐ First-Come, First-Served

☐ Shortest Job Next

☒ Round-Robin

☐ Priority Scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 53 of 120 4 Marks

Next Question

A process is in the 'terminated' state when:

- ☐ It is ready to run
- ☒ It has finished execution
- ☐ It is executing I/O
- ☐ It is waiting for resources

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 54 of 120 4 Marks

Next Question

A system crashes after a process starts writing to a file, leaving the file in a corrupted state. Which OS feature prevents such issues?

☐ Preemptive Scheduling

☐ Segmentation

☐ Atomic Operations

☒ File Locking

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 55 of 120 4 Marks

Next Question

What is a zombie process?

- ☒ A process that has been terminated but its entry still exists in the process table
- ☐ A process that has been suspended by the operating system
- ☐ A process that is consuming excessive memory
- ☐ A process in a deadlock state

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 56 of 120 4 Marks

Next Question

In a process control block (PCB), which of the following is stored?

☐ Process state

☒ All of the above

☐ Process privileges

☐ Process identifier

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 57 of 120 4 Marks

Next Question

What happens to child processes if the parent process is terminated?

- ☐ Child processes stop immediately
- ☐ Child processes enter a zombie state
- ☐ Child processes are also terminated
- ☒ Child processes continue execution under the init process

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 58 of 120 4 Marks

Next Question

Which scheduling algorithm can lead to starvation?

- ☒ Shortest Job First
- ☐ Round Robin
- ☐ First-Come, First-Served
- ☐ Priority Scheduling

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 59 of 120 4 Marks

Next Question

Which of the following is not a state of a process?

- ☐ Blocked
- ☒ Deadlocked
- ☐ Running
- ☐ Ready

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 60 of 120 4 Marks

Next Question

What is the parent process?

☒ The process that initiates other processes

☐ The process that handles all I/O operations

☐ The process that has terminated

☐ The process that is waiting for I/O

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

«

58

59

60

61

62

63

»



Question No. 61 of 120 4 Marks 1 Negative Marks

Next Question

In operating systems, what is the 'critical section' problem?

- ☐ A problem in page replacement algorithms
- ☒ A situation where multiple processes access and manipulate shared data concurrently
- ☐ A condition where processes are locked in a deadlock
- ☐ A method for allocating memory to processes

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 62 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following algorithms is used to prevent deadlocks by ensuring that resource allocation does not lead to a circular wait?

- ☒ Banker's Algorithm
- ☐ Priority Scheduling
- ☐ Round Robin Scheduling
- ☐ Multilevel Feedback Queue

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 63 of 120 4 Marks 1 Negative Marks

Next Question

What is a binary semaphore?

- ☒ A semaphore with two states: locked and unlocked
- ☐ A system call for managing processes
- ☐ A type of mutex used for multithreading
- ☐ A semaphore used to prevent deadlocks

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 64 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following algorithms is commonly used for deadlock detection?

☒ Banker's Algorithm

☐ Round Robin

☐ First-Come, First-Served

☐ Shortest Job First

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 65 of 120 4 Marks 1 Negative Marks

Next Question

What is the primary role of a file system in an operating system?

- ☒ To organize and store files on storage devices
- ☐ To handle process scheduling
- ☐ To manage memory allocation
- ☐ To manage hardware interrupts

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 66 of 120 4 Marks 1 Negative Marks

Next Question

What is the role of the scheduler in an operating system?

- ☐ To allocate CPU time to processes
- ☐ To manage file access permissions
- ☒ To allocate memory to processes
- ☐ To prevent race conditions

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 67 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following scheduling algorithms is the simplest and easiest to implement?

- ☐ Priority Scheduling
- ☐ Shortest Job First Scheduling
- ☒ First-Come, First-Served Scheduling
- ☐ Round Robin Scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 68 of 120 4 Marks 1 Negative Marks

Next Question

In operating systems, what is a 'deadlock'?

- ☒ A state where two or more processes are blocked forever, waiting for each other
- ☐ A way to schedule multiple processes
- ☐ A method used to prevent CPU starvation
- ☐ A situation where processes share resources without contention

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 69 of 120 4 Marks 1 Negative Marks

Next Question

What does 'preemptive' mean in the context of CPU scheduling?

- ☐ The operating system cannot interrupt a running process
- ☐ The CPU must complete the current process before moving to the next
- ☐ The system switches processes only after they complete
- ☒ The CPU can be taken away from a running process if a higher-priority process arrives

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 70 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following best defines a 'system call' in an operating system?

- ☐ A user-mode function used to access memory
- ☒ A request from an application to the operating system for a service
- ☐ An error reported by the kernel
- ☐ A method of memory allocation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 71 of 120 4 Marks 1 Negative Marks

Next Question

What is the purpose of the 'exec' family of system calls in UNIX?

- ☐ To terminate a process
- ☐ To create a new process
- ☒ To replace the current process image with a new process image
- ☐ To suspend the execution of a process

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 72 of 120 4 Marks 1 Negative Marks

Next Question

What is the purpose of a TLB (Translation Lookaside Buffer) in virtual memory management?

- ☐ It handles page faults
- ☐ It stores physical memory blocks
- ☐ It manages virtual memory allocation
- ☒ It stores a cache of recent page table entries

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 73 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following is a page replacement algorithm?

☐ Banker's Algorithm

☒ LRU (Least Recently Used)

☐ Priority Scheduling

☐ Round Robin

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 74 of 120 4 Marks 1 Negative Marks

Next Question

What is the main benefit of using segmentation in memory management?

- ☒ It prevents thrashing
- ☐ It reduces page faults
- ☐ It ensures that processes execute faster
- ☐ It provides better protection and sharing of data

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 75 of 120 4 Marks 1 Negative Marks

✎ Next Question

Which of the following best defines the concept of 'paging' in operating systems?

- ☐ It is a process scheduling algorithm
- ☐ It is a method for managing virtual memory
- ☒ It is a memory management scheme that eliminates the need for contiguous allocation of physical memory
- ☐ It is a deadlock prevention mechanism

Next Question

Clear Answer

⚠ Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 76 of 120 4 Marks 1 Negative Marks

🔍 Next Question

In a multi-level feedback queue scheduling algorithm, processes are:

- ☒ Switched to a higher priority queue after every time quantum
- ☐ Locked in a single queue for their entire execution
- ☐ All assigned to the same priority level
- ☐ Moved between different queues based on their behavior

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 77 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following statements is true about thrashing?

- ☒ It occurs when a system spends the majority of its time swapping pages
- ☐ It occurs when the system runs out of memory
- ☐ It improves system performance
- ☐ It is a method to avoid deadlocks

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 78 of 120 4 Marks 1 Negative Marks

Next Question

Which operating system component is responsible for managing system resources and hardware?

☐ Scheduler

☐ Memory Manager

☒ Kernel

☐ File System

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 79 of 120 4 Marks 1 Negative Marks

Next Question

What is the main difference between preemptive and non-preemptive scheduling?

- ☐ Non-preemptive scheduling requires more memory
- ☐ Preemptive scheduling gives more priority to I/O-bound processes
- ☒ Preemptive scheduling allows processes to be interrupted, non-preemptive does not
- ☐ Non-preemptive scheduling always results in lower CPU utilization

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 80 of 120 4 Marks 1 Negative Marks

Next Question

What is a 'semaphore' in the context of operating systems?

- ☒ A variable used to control access to a common resource in a concurrent system
- ☐ A type of page replacement algorithm
- ☐ A scheduling algorithm
- ☐ A memory allocation technique

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 81 of 120 4 Marks 1 Negative Marks

Next Question

What is the main disadvantage of the First-Come, First-Served (FCFS) scheduling algorithm?

- ☐ It can cause starvation of low-priority processes
- ☐ It always has a higher context switch overhead
- ☐ It is complex to implement
- ☒ It can lead to the convoy effect, where short jobs wait for long jobs to complete

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 82 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following is a necessary condition for a deadlock to occur?

☐ Thrashing

☐ Preemption

☒ Mutual exclusion

☐ Non-preemption

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 83 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following methods is used to prevent race conditions?

☒ Using locks

☐ Round Robin Scheduling

☐ Preemptive Scheduling

☐ FIFO Scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 84 of 120 4 Marks 1 Negative Marks

Next Question

What does the 'wait' system call do in a UNIX-like operating system?

- ☒ It puts the calling process in a waiting state until a signal is received
- ☐ It makes the parent process wait until its child process terminates
- ☐ It suspends the execution of a process
- ☐ It terminates a process

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

<

82

83

84

85

86

87

>



Question No. 85 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following describes virtual memory?

- ☐ A method for preventing deadlock
- ☒ A memory management technique that uses hard disk space as additional RAM
- ☐ A real-time memory management system
- ☐ A feature used in multithreaded applications

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 86 of 120 4 Marks 1 Negative Marks

Next Question

What is a 'context switch' in an operating system?

- ☒ A switch from kernel mode to user mode
- ☐ A method for handling race conditions
- ☐ The process of storing the state of a process so that it can be resumed later
- ☐ A type of page replacement algorithm

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 87 of 120 4 Marks 1 Negative Marks

Next Question

Which memory management technique divides programs into fixed-size units?

☐ Paging

☒ Segmentation

☐ Contiguous Allocation

☐ Fragmentation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 88 of 120 4 Marks 1 Negative Marks

🔍 Next Question

In virtual memory management, what is the role of the 'swap space'?

- ☐ It holds file system metadata
- ☒ It is used to store pages that have been swapped out of memory
- ☐ It stores page tables
- ☐ It is used to allocate physical memory to processes

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 89 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following page replacement algorithms replaces the page that will not be used for the longest period of time in the future?

☒ Optimal Page Replacement

☐ Clock

☐ LRU (Least Recently Used)

☐ FIFO (First In, First Out)

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 90 of 120 4 Marks 1 Negative Marks

Next Question

In a multi-threaded program, which of the following can prevent a deadlock?

- ☐ Increasing the size of the memory pool
- ☐ Preemptive scheduling
- ☒ Enforcing a strict order in which locks are acquired
- ☐ Increasing the number of available processors

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 91 of 120 4 Marks

Next Question

Which of the following conditions can lead to deadlock in a system?

☒ All of the above

☐ Mutual exclusion

☐ Circular wait

☐ Hold and wait

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 92 of 120 4 Marks

Next Question

In UNIX, what does the exec() system call do?

- ☒ Creates a new process
- ☐ Executes a new program in the context of the current process
- ☐ Terminates the current process
- ☐ Swaps out the current process from memory

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 93 of 120 4 Marks 1 Negative Marks

Next Question

In which memory management scheme are memory chunks of fixed size allocated to processes?

☐ Paging

☒ Segmentation

☐ Virtual Memory

☐ Contiguous Allocation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 94 of 120 4 Marks 1 Negative Marks

Next Question

What is the primary benefit of the Least Recently Used (LRU) page replacement algorithm?

- ☐ It has the lowest page fault rate compared to other algorithms
- ☒ It is the simplest to implement
- ☐ It is the most memory-efficient
- ☐ It is the fastest in practice

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 95 of 120 4 Marks

Next Question

In an indexed allocation scheme, what is stored in the index block?

☒ Pointers to the data blocks of the file

☐ The inode number

☐ Metadata about the file

☐ Actual file data

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 96 of 120 4 Marks

Next Question

In operating systems, what does thrashing refer to?

- ☒ A situation when the system spends the majority of its time swapping pages in and out of memory rather than executing processes
- ☐ A deadlock prevention mechanism
- ☐ A race condition in multi-threaded applications
- ☐ The paging algorithm used to replace old pages with new ones

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 97 of 120 4 Marks 1 Negative Marks

Next Question

What is a segmentation fault?

- ☐ A fault in the memory allocation system
- ☐ A scheduling anomaly in time-sharing systems
- ☒ An error caused by illegal access to a memory location
- ☐ A page fault caused by invalid page access

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 98 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following is an advantage of using multithreading?

☒ Increased performance in multi-core processors

☐ Lower memory overhead

☐ Faster I/O operations

☐ Simplicity in program design

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 99 of 120 4 Marks

Next Question

Which of the following conditions does not contribute to a deadlock?

☒ Preemption

☐ Mutual exclusion

☐ Circular wait

☐ Hold and wait

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 100 of 120 4 Marks

Next Question

What is the primary function of the fork() system call in UNIX-like operating systems?

☐ Suspend a process

☐ Schedule a process

☒ Create a new process

☐ Terminate a process

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 101 of 120 4 Marks 1 Negative Marks

Next Question

Which page replacement algorithm is theoretically optimal?

☒ Optimal Page Replacement

☐ FIFO (First In, First Out)

☐ LRU (Least Recently Used)

☐ Clock

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 102 of 120 4 Marks

Next Question

In paging, the page table is used to:

- ☒ Map logical addresses to physical addresses
- ☐ Store program instructions
- ☐ Manage the stack
- ☐ Store the actual content of pages

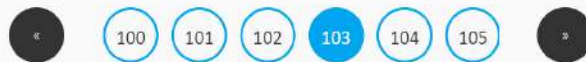
Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 103 of 120 4 Marks 1 Negative Marks

Next Question

In file systems, what is fragmentation?

- ☐ A method for storing small files
- ☐ A memory management technique
- ☒ A condition where files are scattered across non-contiguous blocks of storage
- ☐ A type of file system that stores files in fragments

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 104 of 120 4 Marks

Next Question

In multithreading, which synchronization primitive ensures that only one thread can execute a critical section at a time?

☒ Condition Variables

☐ Monitors

☐ Semaphores

☐ Mutexes

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 105 of 120 4 Marks 1 Negative Marks

Next Question

Which memory management scheme allows a process to be loaded into non-contiguous memory?

☐ Contiguous Allocation

☒ Paging

☐ Fixed Partitioning

☐ Segmentation

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 106 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following is a common method for avoiding deadlock?

- ☐ Allowing circular waits
- ☐ Using preemptive scheduling
- ☐ Increasing the time quantum
- ☒ Using a Banker's algorithm

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 107 of 120 4 Marks 1 Negative Marks

Next Question

What is the primary goal of demand paging?

- ☐ Increase process execution speed
- ☐ Improve the utilization of the CPU
- ☐ Reduce the size of the physical memory required
- ☒ Allow processes to run on non-contiguous memory blocks

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 108 of 120 4 Marks

Next Question

Which scheduling algorithm assigns the CPU to the process that requests the CPU first?

- ☐ Priority Scheduling
- ☐ Shortest Job First Scheduling
- ☒ First-Come, First-Served Scheduling
- ☐ Round-Robin Scheduling

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 109 of 120 4 Marks

Next Question

Which of the following page replacement algorithms suffers from Belady's anomaly?

- ☐ FIFO (First In, First Out)
- ☐ Optimal Page Replacement
- ☐ Clock
- ☒ LRU (Least Recently Used)

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

◀

107

108

109

110

111

112

▶



Question No. 110 of 120 4 Marks 1 Negative Marks

Next Question

In the context of scheduling, what is 'starvation'?

- ☒ When high-priority processes consume all CPU time, preventing low-priority processes from running
- ☐ When a process is forced to wait for I/O operations
- ☐ When processes are denied access to memory
- ☐ When the CPU is idle for long periods

Next Question Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 111 of 120 4 Marks 1 Negative Marks

Next Question

In demand paging, what happens if a page is not in memory?

- ☐ The system crashes
- ☒ The operating system terminates the process
- ☐ A page fault is triggered
- ☐ The process is moved to the ready queue

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 112 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following can help resolve a deadlock?

☐ Increasing memory size

☐ Allowing circular wait

☒ Preemption of resources

☐ Removing the ready queue

Next Question

Clear Answer



Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 113 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following is a non-preemptive scheduling algorithm?

☐ Multilevel Queue

☐ Priority Scheduling

☐ Round Robin

☒ Shortest Job First

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 114 of 120 4 Marks 1 Negative Marks

Next Question

Which scheduling algorithm is commonly used in time-sharing systems?

☐ Priority Scheduling

☐ First-Come, First-Served

☒ Round Robin

☐ Shortest Job First

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



Question No. 115 of 120 4 Marks 1 Negative Marks

✎ Next Question

Which of the following is a key function of the inode in UNIX file systems?

- ☐ It schedules processes for file I/O
- ☒ It stores metadata and pointers to the file data blocks
- ☐ It holds the file data
- ☐ It is used to execute a file

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 116 of 120 4 Marks 1 Negative Marks

Next Question

Which of the following methods is used to handle race conditions in operating systems?

☒ Semaphores

☐ Fragmentation

☐ Paging

☐ Thrashing

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 117 of 120 4 Marks 1 Negative Marks

Next Question

In UNIX, which signal is used to terminate a process?

☐ SIGINT

☒ SIGKILL

☐ SIGTERM

☐ SIGSTOP

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1

<

115

116

117

118

119

120

>



Question No. 118 of 120 4 Marks 1 Negative Marks

Next Question

Which page replacement algorithm replaces the oldest page in memory?

- ☐ LFU (Least Frequently Used)
- ☐ FIFO (First In, First Out)
- ☐ Optimal Page Replacement
- ☒ LRU (Least Recently Used)

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious

Section - 1



Question No. 119 of 120 4 Marks 1 Negative Marks

Next Question

What is the result of a race condition?

- ☐ Multiple processes waiting for resources, leading to deadlock
- ☒ Unpredictable outcomes due to non-sequential execution of processes
- ☐ The operating system entering an idle state
- ☐ Processes running concurrently without issues

Next Question

Clear Answer

Caution! Please do not move away from the window or refresh. You may be marked as suspicious



Section - 1



117

118

119

120



Question No. 120 of 120 4 Marks 1 Negative Marks

In the context of operating systems, what is a 'deadlock'?

- ☒ A state where a process waits indefinitely for resources
- ☐ A method used to improve scheduling
- ☐ A condition that causes process starvation
- ☐ A situation where multiple processes run simultaneously without issues

[Clear Answers](#)

Click the "Finish test" on the top right corner to finish the section.