

Operating systems

1. What is an operating system?

- a) collection of programs that manages hardware resources
- b) system service provider to the application programs
- c) interface between the hardware and application programs
- d) all of the mentioned

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Answer: d

Explanation: An Operating System acts as an intermediary between user/user applications/application programs and hardware. It is a program that manages hardware resources. It provides services to application programs.

2. To access the services of operating system, the interface is provided by the

-
- a) System calls
 - b) API
 - c) Library
 - d) Assembly instructions

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Answer: a

Explanation: To access services of the Operating System an interface is provided by the System Calls. Generally, these are functions written in C and C++. Open, Close, Read, Write are some of most prominently used system calls.

3. Which one of the following is not true?

- a) kernel is the program that constitutes the central core of the operating system
- b) kernel is the first part of operating system to load into memory during booting
- c) kernel is made of various modules which can not be loaded in running operating system
- d) kernel remains in the memory during the entire computer session

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Answer: c

Explanation: Kernel is the first program which is loaded in memory when OS is loading as well as it remains in memory till OS is running. Kernel is the core part of the OS which is responsible for managing resources, allowing multiple processes to use the resources and provide services to various processes. Kernel modules can be loaded and unloaded in run-time i.e. in running OS.

4. Which one of the following error will be handle by the operating system?

- a) power failure
- b) lack of paper in printer
- c) connection failure in the network
- d) all of the mentioned

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Answer: d

Explanation: All the mentioned errors are handled by OS. The OS is continuously monitoring all of its resources. Also, the OS is constantly detecting and correcting errors.

5. What is the main function of the command interpreter?

- a) to get and execute the next user-specified command
- b) to provide the interface between the API and application program
- c) to handle the files in operating system
- d) none of the mentioned

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Answer: a

Explanation: The main function of command interpreter is to get and execute the next user-specified command. Command Interpreter checks for valid command and then runs that command else it will throw an error.

6. In Operating Systems, which of the following is/are CPU scheduling algorithms?

- a) Round Robin
- b) Shortest Job First
- c) Priority
- d) All of the mentioned

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Answer: d

Explanation: In Operating Systems, CPU scheduling algorithms are:

- i) First Come First Served scheduling
- ii) Shortest Job First scheduling
- iii) Priority scheduling
- iv) Round Robin scheduling
- v) Multilevel Queue scheduling
- vi) Multilevel Feedback Queue scheduling

All of these scheduling algorithms have their own advantages and disadvantages.

7. If a process fails, most operating system write the error information to a _____

- a) log file
- b) another running process
- c) new file
- d) none of the mentioned

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Answer: a

Explanation: If a process fails, most operating systems write the error information to a log file. Log file is examined by the debugger, to find out what is the actual cause of that particular problem. Log file is useful for system programmers for correcting errors.

8. Which facility dynamically adds probes to a running system, both in user processes and in the kernel?

- a) DTrace
- b) DLocate
- c) DMap
- d) DAdd

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Answer: a

Explanation: A facility that dynamically adds probes to a running system, both in user process and in the kernel is called DTrace. This is very much useful in troubleshooting kernels in real-time.

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

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

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Answer: d

Explanation: VxWorks, QNX & RTLinux are real-time operating systems. Palm OS is a mobile operating system. Palm OS is developed for Personal Digital Assistants (PDAs).

10. The OS X has _____

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

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Answer: b

1. The systems which allow only one process execution at a time, are called _____

- a) uniprogramming systems
- b) uniprocessing systems
- c) unitasking systems
- d) none of the mentioned

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Answer: b

Explanation: Those systems which allow more than one process execution at a time, are called multiprocessing systems. Uniprocessing means only one processor.

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

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

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Answer: d

Explanation: In Operating Systems, each process has its own address space which contains code, data, stack and heap segments or sections. Each process also has a list of files which is opened by the process as well as all pending alarms, signals and various signal handlers.

3. In Unix, Which system call creates the new process?

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

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Answer: a

Explanation: In UNIX, a new process is created by fork() system call. fork() system call returns a process ID which is generally the process id of the child process created.

4. A process can be terminated due to _____

- a) normal exit
- b) fatal error
- c) killed by another process
- d) all of the mentioned

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Answer: d

Explanation: A process can be terminated normally by completing its task or because of fatal error or killed by another process or forcefully killed by a user. When the process completes its task without any error then it exits normally. The process may exit abnormally because of the occurrence of fatal error while it is running. The process can be killed or terminated forcefully by another process.

5. What is the ready state of a process?

- a) when process is scheduled to run after some execution
- b) when process is unable to run until some task has been completed
- c) when process is using the CPU
- d) none of the mentioned

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Answer: a

Explanation: Ready state of the process means process has all necessary resources which are required for execution of that process when CPU is allocated. Process is ready for execution but waiting for the CPU to be allocated.

6. What is interprocess communication?

- a) communication within the process
- b) communication between two process
- c) communication between two threads of same process

d) none of the mentioned

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Answer: b

Explanation: Interprocess Communication (IPC) is a communication mechanism that allows processes to communicate with each other and synchronise their actions without using the same address space. IPC can be achieved using shared memory and message passing.

7. A set of processes is deadlock if _____

- a) each process is blocked and will remain so forever
- b) each process is terminated
- c) all processes are trying to kill each other
- d) none of the mentioned

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Answer: a

Explanation: Deadlock is a situation which occurs because process A is waiting for one resource and holds another resource (blocking resource). At the same time another process B demands blocking a resource as it is already held by a process A, process B is waiting state unless and until process A releases occupied resource.

8. A process stack does not contain _____

- a) Function parameters
- b) Local variables
- c) Return addresses
- d) PID of child process

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Answer: d

Explanation: Process stack contains Function parameters, Local variables and Return address. It does not contain the PID of child process.

9. Which system call can be used by a parent process to determine the termination of child process?

- a) wait
- b) exit
- c) fork
- d) get

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Answer: a

Explanation: wait() system call is used by the parent process to determine termination of child process. The parent process uses wait() system call and gets the exit status of the child process as well as the pid of the child process which is terminated.

10. The address of the next instruction to be executed by the current process is provided by the _____

- a) CPU registers

- b) Program counter
- c) Process stack
- d) Pipe

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Answer: b

1. A Process Control Block(PCB) does not contain which of the following?

- a) Code
- b) Stack
- c) Bootstrap program
- d) Data

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Answer: c

Explanation: Process Control Block (PCB) contains information related to a process such as Process State, Program Counter, CPU Register, etc. Process Control Block is also known as Task Control Block. Bootstrap program is a program which runs initially when the system or computer is booted or rebooted.

2. The number of processes completed per unit time is known as _____

- a) Output
- b) Throughput
- c) Efficiency
- d) Capacity

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Answer: b

Explanation: The number of processes completed per unit time is known as Throughput. Suppose there are 4 processes A, B, C & D they are taking 1, 3, 4 & 7 units of time respectively for their executions. For 10 units of time, throughput is high if process A, B & C are running first as 3 processes can execute. If process C runs first then throughput is low as maximum only 2 processes can execute. Throughput is low for processes which take a long time for execution. Throughput is high for processes which take a short time for execution.

3. The state of a process is defined by _____

- a) the final activity of the process
- b) the activity just executed by the process
- c) the activity to next be executed by the process
- d) the current activity of the process

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Answer: d

Explanation: The state of a process is defined by the current activity of the process. A process state changes when the process executes. The process states are as New, Ready, Running, Wait, Terminated.

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

- a) New

- b) Old
- c) Waiting
- d) Running

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Answer: b

Explanation: There is no process state such as old. When a process is created then the process is in New state. When the process gets the CPU for its execution then the process is in Running state. When the process is waiting for an external event then the process is in a Waiting state.

5. What is a Process Control Block?

- a) Process type variable
- b) Data Structure
- c) A secondary storage section
- d) A Block in memory

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Answer: b

Explanation: A Process Control Block (PCB) is a data structure. It contains information related to a process such as Process State, Program Counter, CPU Register, etc. Process Control Block is also known as Task Control Block.

6. The entry of all the PCBs of the current processes is in _____

- a) Process Register
- b) Program Counter
- c) Process Table
- d) Process Unit

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Answer: c

Explanation: The entry of all the PCBs of the current processes is in Process Table. The Process Table has the status of each and every process that is created in OS along with their PIDs.

7. What is the degree of multiprogramming?

- a) the number of processes executed per unit time
- b) the number of processes in the ready queue
- c) the number of processes in the I/O queue
- d) the number of processes in memory

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Answer: d

Explanation: Multiprogramming means the number of processes are in the ready states. To increase utilization of CPU, Multiprogramming is one of the most important abilities of OS. Generally, a single process cannot use CPU or I/O at all time, whenever CPU or I/O is available another process can use it. By doing this CPU utilization is increased.

8. A single thread of control allows the process to perform _____

- a) only one task at a time
- b) multiple tasks at a time
- c) only two tasks at a time
- d) all of the mentioned

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Answer: a

Explanation: A single thread of control allows the process to perform only one task at a time. In the case of multi-core, multiple threads can be run simultaneously and can perform multiple tasks at a time.

9. What is the objective of multiprogramming?

- a) Have a process running at all time
- b) Have multiple programs waiting in a queue ready to run
- c) To increase CPU utilization
- d) None of the mentioned

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Answer: c

1. Which of the following do not belong to queues for processes?

- a) Job Queue
- b) PCB queue
- c) Device Queue
- d) Ready Queue

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Answer: b

Explanation: PCB queue does not belong to queues for processes. PCB is a process control block which contains information related to process. Each process is represented by PCB.

2. When the process issues an I/O request _____

- a) It is placed in an I/O queue
- b) It is placed in a waiting queue
- c) It is placed in the ready queue
- d) It is placed in the Job queue

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Answer: a

Explanation: When the process issues an I/O request it is placed in an I/O queue. I/O is a resource and it should be used effectively and every process should get access to it. There might be multiple processes which requested for I/O. Depending on scheduling algorithm I/O is allocated to any particular process and after completing I/O operation, I/O access is returned to the OS.

3. What will happen when a process terminates?

- a) It is removed from all queues
- b) It is removed from all, but the job queue

- c) Its process control block is de-allocated
- d) Its process control block is never de-allocated

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Answer: a

Explanation: When a process terminates, it removes from all queues. All allocated resources to that particular process are deallocated and all those resources are returned back to OS.

4. What is a long-term scheduler?

- a) It selects processes which have to be brought into the ready queue
- b) It selects processes which have to be executed next and allocates CPU
- c) It selects processes which have to remove from memory by swapping
- d) None of the mentioned

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Answer: a

Explanation: A long-term scheduler selects processes which have to be brought into the ready queue. When processes enter the system, they are put in the job queue. Long-term scheduler selects processes from the job queue and puts them in the ready queue. It is also known as Job Scheduler.

5. If all processes I/O bound, the ready queue will almost always be _____ and the Short term Scheduler will have a _____ to do.

- a) full, little
- b) full, lot
- c) empty, little
- d) empty, lot

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Answer: c

Explanation: If all processes are I/O bound, the ready queue will almost empty and the short-term scheduler will have a little to do. I/O bound processes spend more time doing I/O than computation.

6. What is a medium-term scheduler?

- a) It selects which process has to be brought into the ready queue
- b) It selects which process has to be executed next and allocates CPU
- c) It selects which process to remove from memory by swapping
- d) None of the mentioned

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Answer: c

Explanation: A medium-term scheduler selects which process to remove from memory by swapping. The medium-term scheduler swapped out the process and later swapped in. Swapping helps to free up memory.

7. What is a short-term scheduler?

- a) It selects which process has to be brought into the ready queue
- b) It selects which process has to be executed next and allocates CPU

- c) It selects which process to remove from memory by swapping
- d) None of the mentioned

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Answer: b

Explanation: A short-term scheduler selects a process which has to be executed next and allocates CPU. Short-term scheduler selects a process from the ready queue. It selects processes frequently.

8. The primary distinction between the short term scheduler and the long term scheduler is _____

- a) The length of their queues
- b) The type of processes they schedule
- c) The frequency of their execution
- d) None of the mentioned

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Answer: c

Explanation: The primary distinction between the short-term scheduler and the long-term scheduler is the frequency of their execution. The short-term scheduler executes frequently while the long-term scheduler executes much less frequently.

9. The only state transition that is initiated by the user process itself is _____

- a) block
- b) wakeup
- c) dispatch
- d) none of the mentioned

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Answer: a

Explanation: The only state transition that is initiated by the user process itself is block. Whenever a user process initiates an I/O request it goes into block state unless and until the I/O request is not completed.

10. In a time-sharing operating system, when the time slot given to a process is completed, the process goes from the running state to the _____

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

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Answer: b

Explanation: In a time-sharing operating system, when the time slot given to a process is completed, the process goes from the running state to the Ready State. In a time-sharing operating system unit time is defined for sharing CPU, it is called a time quantum or time slice. If a process takes less than 1 time quantum, then the process itself releases the CPU.

11. In a multiprogramming environment _____

- a) the processor executes more than one process at a time
- b) the programs are developed by more than one person
- c) more than one process resides in the memory
- d) a single user can execute many programs at the same time

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Answer: c

Explanation: In a multiprogramming environment more than one process resides in the memory. Whenever a CPU is available, one process amongst all present in memory gets the CPU for execution. Multiprogramming increases CPU utilization.

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

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

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Answer: b

Explanation: Suppose that a process is in "Blocked" state waiting for some I/O service. When the service is completed, it goes to the ready state. Process never goes directly to the running state from the waiting state. Only processes which are in ready state go to the running state whenever CPU allocated by operating system.

13. The context of a process in the PCB of a process does not contain _____

- a) the value of the CPU registers
- b) the process state
- c) memory-management information
- d) context switch time

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Answer: d

Explanation: The context of a process in the PCB of a process does not contain context switch time. When switching CPU from one process to another, the current context of the process needs to be saved. It includes values of the CPU registers, process states, memory-management information.

14. Which of the following need not necessarily be saved on a context switch between processes?

- a) General purpose registers
- b) Translation lookaside buffer
- c) Program counter
- d) All of the mentioned

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Answer: b

Explanation: Translation Look-aside Buffer (TLB) need not necessarily be saved on a

context switch between processes. A special, small, fast-lookup hardware cache is called Translation Look-aside Buffer. TLB used to reduce memory access time.

15. Which of the following does not interrupt a running process?

- a) A device
- b) Timer
- c) Scheduler process
- d) Power failure

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Answer: c

1. Which process can be affected by other processes executing in the system?

- a) cooperating process
- b) child process
- c) parent process
- d) init process

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Answer: a

Explanation: A cooperating process can be affected by other processes executing in the system. Also it can affect other processes executing in the system. A process shares data with other processes, such a process is known as a cooperating process.

2. When several processes access the same data concurrently and the outcome of the execution depends on the particular order in which the access takes place is called _____

- a) dynamic condition
- b) race condition
- c) essential condition
- d) critical condition

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Answer: b

Explanation: When several processes access the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called race condition.

3. If a process is executing in its critical section, then no other processes can be executing in their critical section. What is this condition called?

- a) mutual exclusion
- b) critical exclusion
- c) synchronous exclusion
- d) asynchronous exclusion

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Answer: a

Explanation: If a process is executing in its critical section, then no other processes can be executed in their critical section. This condition is called Mutual Exclusion.

Critical section of the process is shared between multiple processes. If this section is executed by more than one or all of them concurrently then the outcome of this is not as per desired outcome. For this reason the critical section of the process should not be executed concurrently.

4. Which one of the following is a synchronization tool?

- a) thread
- b) pipe
- c) semaphore
- d) socket

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Answer: c

Explanation: Semaphore is a synchronization tool. Semaphore is a mechanism which synchronizes or controls access of threads on critical resources. There are two types of semaphores i) Binary Semaphore ii) Counting Semaphore.

5. A semaphore is a shared integer variable _____

- a) that can not drop below zero
- b) that can not be more than zero
- c) that can not drop below one
- d) that can not be more than one

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Answer: a

Explanation: A semaphore is a shared integer variable that can not drop below zero. In binary semaphore, if the value of the semaphore variable is zero that means there is a process that uses a critical resource and no other process can access the same critical resource until it is released. In Counting semaphore, if the value of the semaphore variable is zero that means there is no resource available.

6. Mutual exclusion can be provided by the _____

- a) mutex locks
- b) binary semaphores
- c) both mutex locks and binary semaphores
- d) none of the mentioned

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Answer: c

Explanation: Mutual exclusion can be provided by both mutex locks and binary semaphore. Mutex is a short form of **Mutual Exclusion**. Binary semaphore also provides a mechanism for mutual exclusion. Binary semaphore behaves similar to mutex locks.

7. When high priority task is indirectly preempted by medium priority task effectively inverting the relative priority of the two tasks, the scenario is called _____

- a) priority inversion
- b) priority removal

- c) priority exchange
- d) priority modification

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Answer: a

Explanation: When a high priority task is indirectly preempted by a medium priority task effectively inverting the relative priority of the two tasks, the scenario is called priority inversion.

8. Process synchronization can be done on _____

- a) hardware level
- b) software level
- c) both hardware and software level
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: Process synchronization can be done on both hardware and software level. Critical section problems can be resolved using hardware synchronisation. But this method is not simple for implementation so software synchronization is mostly used.

9. A monitor is a module that encapsulates _____

- a) shared data structures
- b) procedures that operate on shared data structure
- c) synchronization between concurrent procedure invocation
- d) all of the mentioned

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Answer: d

Explanation: A monitor is a module that encapsulates shared data structures, procedures that operate on shared data structure, synchronization between concurrent procedure invocation.

10. To enable a process to wait within the monitor _____

- a) a condition variable must be declared as condition
- b) condition variables must be used as boolean objects
- c) semaphore must be used
- d) all of the mentioned

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Answer: a

1. Restricting the child process to a subset of the parent's resources prevents any process from _____

- a) overloading the system by using a lot of secondary storage
- b) under-loading the system by very less CPU utilization
- c) overloading the system by creating a lot of sub-processes
- d) crashing the system by utilizing multiple resources

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Answer: c

Explanation: Restricting the child process to a subset of the parent's resources prevents any process from overloading the system by creating a lot of sub-processes. A process creates a child process, child process requires certain resources to complete its task. A child process can demand required resources directly from the system, but by doing this system will be overloaded. So to avoid overloading of the system, the parent process shares its resources among children.

2. A parent process calling ____ system call will be suspended until children processes terminate.

- a) wait
- b) fork
- c) exit
- d) exec

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Answer: a

Explanation: A parent process calling wait system call will be suspended until children processes terminate. A parameter is passed to wait system call which will obtain exit status of child as well as wait system call returns PID of terminated process.

3. Cascading termination refers to termination of all child processes if the parent process terminates ____

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

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Answer: c

Explanation: Cascading termination refers to termination of all child processes if the parent process terminates Normally or Abnormally. Some systems don't allow child processes to exist if the parent process has terminated. Cascading termination is normally initiated by the operating system.

4. With _____ only one process can execute at a time; meanwhile all other process are waiting for the processor. With _____ more than one process can be running simultaneously each on a different processor.

- a) Multiprocessing, Multiprogramming
- b) Multiprogramming, Uniprocessing
- c) Multiprogramming, Multiprocessing
- d) Uniprocessing, Multiprocessing

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Answer: d

Explanation: With Uniprocessing only one process can execute at a time; meanwhile all other processes are waiting for the processor. With Multiprocessing

more than one process can run simultaneously each on different processors. The Uniprogramming system has only one program inside the core while the Multiprocessing system has multiple processes inside multiple cores. The core is one which executes instructions and stores data locally into registers.

5. In UNIX, each process is identified by its _____

- a) Process Control Block
- b) Device Queue
- c) Process Identifier
- d) None of the mentioned

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Answer: c

Explanation: In Unix, each process is identified by its Process Identifier or PID. The PID provides unique value to each process in the system so that each process can be identified uniquely.

6. In UNIX, the return value for the fork system call is ____ for the child process and ____ for the parent process.

- a) A Negative integer, Zero
- b) Zero, A Negative integer
- c) Zero, A nonzero integer
- d) A nonzero integer, Zero

[View Answer](#)

Answer: c

Explanation: In Unix, the return value of the fork system call is Zero for the child process and Non-zero value for parent process. A fork system call returns the PID of a newly created (child) process to the parent and returns Zero to that newly created (child) process.

7. The child process can _____

- a) be a duplicate of the parent process
- b) never be a duplicate of the parent process
- c) cannot have another program loaded into it
- d) never have another program loaded into it

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Answer: a

Explanation: The child process can be a duplicate of the parent process. The child process created by fork consists of a copy of the address space of the parent process.

8. The child process completes execution, but the parent keeps executing, then the child process is known as _____

- a) Orphan
- b) Zombie
- c) Body

d) Dead

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Answer: b

1. What is Interprocess communication?

- a) allows processes to communicate and synchronize their actions when using the same address space
- b) allows processes to communicate and synchronize their actions
- c) allows the processes to only synchronize their actions without communication
- d) none of the mentioned

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Answer: b

Explanation: Interprocess Communication allows processes to communicate and synchronize their actions. Interprocess Communication (IPC) mechanism is used by cooperating processes to exchange data and information.

There are two models of IPC:

→ Shared Memory

→ Message Passing

2. Message passing system allows processes to _____

- a) communicate with each other without sharing the same address space
- b) communicate with one another by resorting to shared data
- c) share data
- d) name the recipient or sender of the message

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Answer: a

Explanation: Message Passing system allows processes to communicate with each other without sharing the same address space.

3. Which of the following two operations are provided by the IPC facility?

- a) write & delete message
- b) delete & receive message
- c) send & delete message
- d) receive & send message

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Answer: d

Explanation: Two operations provided by the IPC facility are receive and send messages. Exchange of data takes place in cooperating processes.

4. Messages sent by a process _____

- a) have to be of a fixed size
- b) have to be a variable size
- c) can be fixed or variable sized
- d) none of the mentioned

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Answer: c

Explanation: Messages sent by a process can be fixed or variable size. If the message size of the process is fixed then system level implementation is straightforward but it makes the task of programming more difficult. If the message size of the process is variable then system level implementation is more complex but it makes the task of programming simpler.

5. The link between two processes P and Q to send and receive messages is called

- a) communication link
- b) message-passing link
- c) synchronization link
- d) all of the mentioned

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Answer: a

Explanation: The link between two processes P and Q to send and receive messages is called communication link. Two processes P and Q want to communicate with each other; there should be a communication link that must exist between these two processes so that both processes can able to send and receive messages using that link.

6. Which of the following are TRUE for direct communication?

- a) A communication link can be associated with N number of process($N = \text{max. number of processes supported by system}$)
- b) A communication link is associated with exactly two processes
- c) Exactly $N/2$ links exist between each pair of processes($N = \text{max. number of processes supported by system}$)
- d) Exactly two link exists between each pair of processes

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Answer: b

Explanation: For direct communication, a communication link is associated with exactly two processes. One communication link must exist between a pair of processes.

7. In indirect communication between processes P and Q _____

- a) there is another process R to handle and pass on the messages between P and Q
- b) there is another machine between the two processes to help communication
- c) there is a mailbox to help communication between P and Q
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: In indirect communication between processes P and Q there is a mailbox to help communication between P and Q. A mailbox can be viewed abstractly as an object into which messages can be placed by processes and from which messages can be removed.

8. In the non blocking send _____

- a) the sending process keeps sending until the message is received
- b) the sending process sends the message and resumes operation
- c) the sending process keeps sending until it receives a message
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: In the non blocking send, the sending process sends the message and resumes operation. Sending process doesn't care about reception. It is also known as asynchronous send.

9. In the Zero capacity queue _____

- a) the queue can store at least one message
- b) the sender blocks until the receiver receives the message
- c) the sender keeps sending and the messages don't wait in the queue
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: In the Zero capacity queue the sender blocks until the receiver receives the message. Zero capacity queue has maximum capacity of Zero; thus message queue does not have any waiting message in it.

10. The Zero Capacity queue _____

- a) is referred to as a message system with buffering
- b) is referred to as a message system with no buffering
- c) is referred to as a link
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: The Zero capacity queue is referred to as a message system with no buffering. Zero capacity queue has maximum capacity of Zero; thus message queue does not have any waiting message in it.

11. Bounded capacity and Unbounded capacity queues are referred to as _____

- a) Programmed buffering
- b) Automatic buffering
- c) User defined buffering
- d) No buffering

[View Answer](#)

Answer: b

1. Remote Procedure Calls are used _____

- a) for communication between two processes remotely different from each other on the same system
- b) for communication between two processes on the same system
- c) for communication between two processes on separate systems

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. To differentiate the many network services a system supports _____ are used.

- a) Variables
- b) Sockets
- c) Ports
- d) Service names

[View Answer](#)

Answer: c

Explanation: None.

3. RPC provides a(an) _____ on the client-side, a separate one for each remote procedure.

- a) stub
- b) identifier
- c) name
- d) process identifier

[View Answer](#)

Answer: a

Explanation: None.

4. What is stub?

- a) transmits the message to the server where the server side stub receives the message and invokes procedure on the server side
- b) packs the parameters into a form transmittable over the network
- c) locates the port on the server
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

5. To resolve the problem of data representation on different systems RPCs define _____

- a) machine dependent representation of data
- b) machine representation of data
- c) machine-independent representation of data
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. What is the full form of RMI?

- a) Remote Memory Installation

- b) Remote Memory Invocation
- c) Remote Method Installation
- d) Remote Method Invocation

[View Answer](#)

Answer: d

Explanation: None.

7. The remote method invocation _____

- a) allows a process to invoke memory on a remote object
- b) allows a thread to invoke a method on a remote object
- c) allows a thread to invoke memory on a remote object
- d) allows a process to invoke a method on a remote object

[View Answer](#)

Answer: b

Explanation: None.

8. A process that is based on IPC mechanism which executes on different systems and can communicate with other processes using message based communication, is called _____

- a) Local Procedure Call
- b) Inter Process Communication
- c) Remote Procedure Call
- d) Remote Machine Invocation

[View Answer](#)

Answer: c

1. Which module gives control of the CPU to the process selected by the short-term scheduler?

- a) dispatcher
- b) interrupt
- c) scheduler
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called _____

- a) job queue
- b) ready queue
- c) execution queue
- d) process queue

[View Answer](#)

Answer: b

Explanation: None.

3. The interval from the time of submission of a process to the time of completion is termed as _____

- a) waiting time
- b) turnaround time
- c) response time
- d) throughput

[View Answer](#)

Answer: b

Explanation: None.

4. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?

- a) first-come, first-served scheduling
- b) shortest job scheduling
- c) priority scheduling
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. In priority scheduling algorithm _____

- a) CPU is allocated to the process with highest priority
- b) CPU is allocated to the process with lowest priority
- c) Equal priority processes can not be scheduled
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of _____

- a) all process
- b) currently running process
- c) parent process
- d) init process

[View Answer](#)

Answer: b

Explanation: None.

7. Which algorithm is defined in Time quantum?

- a) shortest job scheduling algorithm
- b) round robin scheduling algorithm
- c) priority scheduling algorithm
- d) multilevel queue scheduling algorithm

[View Answer](#)

Answer: b

Explanation: None.

8. Process are classified into different groups in _____

- a) shortest job scheduling algorithm
- b) round robin scheduling algorithm
- c) priority scheduling algorithm
- d) multilevel queue scheduling algorithm

[View Answer](#)

Answer: d

Explanation: None.

9. In multilevel feedback scheduling algorithm _____

- a) a process can move to a different classified ready queue
- b) classification of ready queue is permanent
- c) processes are not classified into groups
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. Which one of the following can not be scheduled by the kernel?

- a) kernel level thread
- b) user level thread
- c) process
- d) none of the mentioned

[View Answer](#)

Answer: b

1. CPU scheduling is the basis of _____

- a) multiprocessor systems
- b) multiprogramming operating systems
- c) larger memory sized systems
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. With multiprogramming _____ is used productively.

- a) time
- b) space
- c) money
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. What are the two steps of a process execution?

- a) I/O & OS Burst
- b) CPU & I/O Burst
- c) Memory & I/O Burst
- d) OS & Memory Burst

[View Answer](#)

Answer: b

Explanation: None.

4. An I/O bound program will typically have _____

- a) a few very short CPU bursts
- b) many very short I/O bursts
- c) many very short CPU bursts
- d) a few very short I/O bursts

[View Answer](#)

Answer: c

Explanation: None.

5. A process is selected from the _____ queue by the _____ scheduler, to be executed.

- a) blocked, short term
- b) wait, long term
- c) ready, short term
- d) ready, long term

[View Answer](#)

Answer: c

Explanation: None.

6. In the following cases non – preemptive scheduling occurs?

- a) When a process switches from the running state to the ready state
- b) When a process goes from the running state to the waiting state
- c) When a process switches from the waiting state to the ready state
- d) All of the mentioned

[View Answer](#)

Answer: b

Explanation: There is no other choice.

7. The switching of the CPU from one process or thread to another is called _____

- a) process switch
- b) task switch
- c) context switch
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

8. What is Dispatch latency?

- a) the speed of dispatching a process from running to the ready state
- b) the time of dispatching a process from running to ready state and keeping the CPU idle
- c) the time to stop one process and start running another one
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

9. Scheduling is done so as to _____

- a) increase CPU utilization
- b) decrease CPU utilization
- c) keep the CPU more idle
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. Scheduling is done so as to _____

- a) increase the throughput
- b) decrease the throughput
- c) increase the duration of a specific amount of work
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

11. What is Turnaround time?

- a) the total waiting time for a process to finish execution
- b) the total time spent in the ready queue
- c) the total time spent in the running queue
- d) the total time from the completion till the submission of a process

[View Answer](#)

Answer: d

Explanation: None.

12. Scheduling is done so as to _____

- a) increase the turnaround time
- b) decrease the turnaround time
- c) keep the turnaround time same
- d) there is no relation between scheduling and turnaround time

[View Answer](#)

Answer: b

Explanation: None.

13. What is Waiting time?

- a) the total time in the blocked and waiting queues
- b) the total time spent in the ready queue
- c) the total time spent in the running queue
- d) the total time from the completion till the submission of a process

[View Answer](#)

Answer: b

Explanation: None.

14. Scheduling is done so as to _____

- a) increase the waiting time
- b) keep the waiting time the same
- c) decrease the waiting time
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

15. What is Response time?

- a) the total time taken from the submission time till the completion time
- b) the total time taken from the submission time till the first response is produced
- c) the total time taken from submission time till the response is output
- d) none of the mentioned

[View Answer](#)

Answer: b

1. Round robin scheduling falls under the category of _____

- a) Non-preemptive scheduling
- b) Preemptive scheduling
- c) All of the mentioned
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. With round robin scheduling algorithm in a time shared system _____

- a) using very large time slices converts it into First come First served scheduling algorithm
- b) using very small time slices converts it into First come First served scheduling algorithm
- c) using extremely small time slices increases performance
- d) using very small time slices converts it into Shortest Job First algorithm

[View Answer](#)

Answer: a

Explanation: All the processes will be able to get completed.

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

- a) assigning ready processes to CPU
- b) assigning ready processes to waiting queue
- c) assigning running processes to blocked queue
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. Complex scheduling algorithms _____

- a) are very appropriate for very large computers
- b) use minimal resources
- c) use many resources
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: Large computers are overloaded with a greater number of processes.

5. What is FIFO algorithm?

- a) first executes the job that came in last in the queue
- b) first executes the job that came in first in the queue
- c) first executes the job that needs minimal processor
- d) first executes the job that has maximum processor needs

[View Answer](#)

Answer: b

Explanation: None.

6. The strategy of making processes that are logically runnable to be temporarily suspended is called _____

- a) Non preemptive scheduling
- b) Preemptive scheduling
- c) Shortest job first
- d) First come First served

[View Answer](#)

Answer: b

Explanation: None.

7. What is Scheduling?

- a) allowing a job to use the processor
- b) making proper use of processor
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. There are 10 different processes running on a workstation. Idle processes are waiting for an input event in the input queue. Busy processes are scheduled with the Round-Robin time sharing method. Which out of the following quantum times is the best value for small response times, if the processes have a short runtime, e.g. less than 10ms?

- a) $t_Q = 15\text{ms}$
- b) $t_Q = 40\text{ms}$
- c) $t_Q = 45\text{ms}$
- d) $t_Q = 50\text{ms}$

[View Answer](#)

Answer: a

Explanation: None.

9. Orders are processed in the sequence they arrive if _____ rule sequences the jobs.

- a) earliest due date
- b) slack time remaining
- c) first come, first served
- d) critical ratio

[View Answer](#)

Answer: c

Explanation: None.

10. Which of the following algorithms tends to minimize the process flow time?

- a) First come First served
- b) Shortest Job First
- c) Earliest Deadline First
- d) Longest Job First

[View Answer](#)

Answer: b

Explanation: None.

11. Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____

- a) Lengthened; Shortened
- b) Shortened; Lengthened
- c) Shortened; Shortened
- d) Shortened; Unchanged

[View Answer](#)

Answer: b

Explanation: None.

12. Which of the following statements are true? (GATE 2010)

I. Shortest remaining time first scheduling may cause starvation

II. Preemptive scheduling may cause starvation

III. Round robin is better than FCFS in terms of response time

- a) I only
- b) I and III only
- c) II and III only
- d) I, II and III

[View Answer](#)

Answer: d

1. Which is the most optimal scheduling algorithm?

- a) FCFS – First come First served
- b) SJF – Shortest Job First
- c) RR – Round Robin
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. The real difficulty with SJF in short term scheduling is _____

- a) it is too good an algorithm
- b) knowing the length of the next CPU request
- c) it is too complex to understand
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. The FCFS algorithm is particularly troublesome for _____

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

[View Answer](#)

Answer: b

Explanation: In a time sharing system, each user needs to get a share of the CPU at regular intervals.

4. Consider the following set of processes, the length of the CPU burst time given in milliseconds.

Process	Burst time
P1	6
P2	8
P3	7
P4	3

Assuming the above process being scheduled with the SJF scheduling algorithm.

- a) The waiting time for process P1 is 3ms
- b) The waiting time for process P1 is 0ms
- c) The waiting time for process P1 is 16ms
- d) The waiting time for process P1 is 9ms

[View Answer](#)

Answer: a

Explanation: None.

5. Preemptive Shortest Job First scheduling is sometimes called _____

- a) Fast SJF scheduling
- b) EDF scheduling – Earliest Deadline First
- c) HRRN scheduling – Highest Response Ratio Next
- d) SRTN scheduling – Shortest Remaining Time Next

[View Answer](#)

Answer: d

Explanation: None.

6. An SJF algorithm is simply a priority algorithm where the priority is _____

- a) the predicted next CPU burst
- b) the inverse of the predicted next CPU burst
- c) the current CPU burst
- d) anything the user wants

[View Answer](#)

Answer: a

Explanation: The larger the CPU burst, the lower the priority.

7. Choose one of the disadvantages of the priority scheduling algorithm?

- a) it schedules in a very complex manner
- b) its scheduling takes up a lot of time
- c) it can lead to some low priority process waiting indefinitely for the CPU
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

8. What is 'Aging'?

- a) keeping track of cache contents
- b) keeping track of what pages are currently residing in memory
- c) keeping track of how many times a given page is referenced
- d) increasing the priority of jobs to ensure termination in a finite time

[View Answer](#)

Answer: d

Explanation: None.

9. A solution to the problem of indefinite blockage of low – priority processes is _____

- a) Starvation
- b) Wait queue
- c) Ready queue
- d) Aging

[View Answer](#)

Answer: d

Explanation: None.

10. Which of the following statements are true? (GATE 2010)

- i) Shortest remaining time first scheduling may cause starvation
- ii) Preemptive scheduling may cause starvation
- iii) Round robin is better than FCFS in terms of response time

- a) i only
- b) i and iii only
- c) ii and iii only
- d) i, ii and iii

[View Answer](#)

Answer: d

Explanation: None.

11. Which of the following scheduling algorithms gives minimum average waiting time?

- a) FCFS
- b) SJF
- c) Round – robin
- d) Priority

[View Answer](#)

Answer: b

1. Concurrent access to shared data may result in _____

- a) data consistency
- b) data insecurity
- c) data inconsistency
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called _____

- a) data consistency
- b) race condition
- c) aging
- d) starvation

[View Answer](#)

Answer: b

Explanation: None.

3. The segment of code in which the process may change common variables, update tables, write into files is known as _____

- a) program
- b) critical section
- c) non – critical section
- d) synchronizing

[View Answer](#)

Answer: b

Explanation: None.

4. Which of the following conditions must be satisfied to solve the critical section problem?

- a) Mutual Exclusion
- b) Progress
- c) Bounded Waiting
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

5. Mutual exclusion implies that _____

- a) if a process is executing in its critical section, then no other process must be executing in their critical sections
- b) if a process is executing in its critical section, then other processes must be executing in their critical sections
- c) if a process is executing in its critical section, then all the resources of the system must be blocked until it finishes execution
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. Bounded waiting implies that there exists a bound on the number of times a process is allowed to enter its critical section _____

- a) after a process has made a request to enter its critical section and before the

request is granted

b) when another process is in its critical section

c) before a process has made a request to enter its critical section

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. A minimum of ____ variable(s) is/are required to be shared between processes to solve the critical section problem.

a) one

b) two

c) three

d) four

[View Answer](#)

Answer: b

Explanation: None.

8. In the bakery algorithm to solve the critical section problem _____

a) each process is put into a queue and picked up in an ordered manner

b) each process receives a number (may or may not be unique) and the one with the lowest number is served next

c) each process gets a unique number and the one with the highest number is served next

d) each process gets a unique number and the one with the lowest number is served next

[View Answer](#)

Answer: b

1. What will happen if a non-recursive mutex is locked more than once?

a) Starvation

b) Deadlock

c) Aging

d) Signaling

[View Answer](#)

Answer: b

Explanation: If a thread which had already locked a mutex, tries to lock the mutex again, it will enter into the waiting list of that mutex, which results in a deadlock. It is because no other thread can unlock the mutex.

2. What is a semaphore?

a) is a binary mutex

b) must be accessed from only one process

c) can be accessed from multiple processes

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. What are the two kinds of semaphores?

- a) mutex & counting
- b) binary & counting
- c) counting & decimal
- d) decimal & binary

[View Answer](#)

Answer: b

Explanation: None.

4. What is a mutex?

- a) is a binary mutex
- b) must be accessed from only one process
- c) can be accessed from multiple processes
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. At a particular time of computation the value of a counting semaphore is 7. Then 20 P operations and 15 V operations were completed on this semaphore. The resulting value of the semaphore is? (GATE 1987)

- a) 42
- b) 2
- c) 7
- d) 12

[View Answer](#)

Answer: b

Explanation: P represents Wait and V represents Signal. P operation will decrease the value by 1 every time and V operation will increase the value by 1 every time.

6. A binary semaphore is a semaphore with integer values _____

- a) 1
- b) -1
- c) 0.8
- d) 0.5

[View Answer](#)

Answer: a

Explanation: None.

7. The following pair of processes share a common variable X.

```
Process A
int Y;
A1: Y = X*2;
```

```
A2: X = Y;
```

```
Process B
```

```
int Z;
```

```
B1: Z = X+1;
```

```
B2: X = Z;
```

X is set to 5 before either process begins execution. As usual, statements within a process are executed sequentially, but statements in process A may execute in any order with respect to statements in process B.

How many different values of X are possible after both processes finish executing?

- a) two
- b) three
- c) four
- d) eight

[View Answer](#)

Answer: c

Explanation: Here are the possible ways in which statements from A and B can be interleaved.

A1 A2 B1 B2: X = 11

A1 B1 A2 B2: X = 6

A1 B1 B2 A2: X = 10

B1 A1 B2 A2: X = 10

B1 A1 A2 B2: X = 6

B1 B2 A1 A2: X = 12.

8. The program follows to use a shared binary semaphore T.

```
Process A
```

```
int Y;
```

```
A1: Y = X*2;
```

```
A2: X = Y;
```

```
signal(T);
```

```
Process B
```

```
int Z;
```

```
B1: wait(T);
```

```
B2: Z = X+1;
```

```
X = Z;
```

T is set to 0 before either process begins execution and, as before, X is set to 5.

Now, how many different values of X are possible after both processes finish executing?

- a) one
- b) two
- c) three
- d) four

[View Answer](#)

Answer: a

Explanation: The semaphore T ensures that all the statements from A finish

execution before B begins. So now there is only one way in which statements from A and B can be interleaved:

A1 A2 B1 B2: X = 11.

9. Semaphores are mostly used to implement _____

- a) System calls
- b) IPC mechanisms
- c) System protection
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

10. Spinlocks are intended to provide _____ only.

- a) Mutual Exclusion
- b) Bounded Waiting
- c) Aging
- d) Progress

[View Answer](#)

Answer: b

1. The bounded buffer problem is also known as _____

- a) Readers – Writers problem
- b) Dining – Philosophers problem
- c) Producer – Consumer problem
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. In the bounded buffer problem, there are the empty and full semaphores that _____

- a) count the number of empty and full buffers
- b) count the number of empty and full memory spaces
- c) count the number of empty and full queues
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. In the bounded buffer problem _____

- a) there is only one buffer
- b) there are n buffers (n being greater than one but finite)
- c) there are infinite buffers
- d) the buffer size is bounded

[View Answer](#)

Answer: b

Explanation: None.

4. To ensure difficulties do not arise in the readers – writers problem _____ are given exclusive access to the shared object.

- a) readers
- b) writers
- c) readers and writers
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. The dining – philosophers problem will occur in case of _____

- a) 5 philosophers and 5 chopsticks
- b) 4 philosophers and 5 chopsticks
- c) 3 philosophers and 5 chopsticks
- d) 6 philosophers and 5 chopsticks

[View Answer](#)

Answer: a

Explanation: None.

6. A deadlock free solution to the dining philosophers problem _____

- a) necessarily eliminates the possibility of starvation
- b) does not necessarily eliminate the possibility of starvation
- c) eliminates any possibility of any kind of problem further
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. All processes share a semaphore variable **mutex**, initialized to 1. Each process must execute wait(mutex) before entering the critical section and signal(mutex) afterward.

Suppose a process executes in the following manner.

```
signal(mutex);  
.....  
critical section  
.....  
wait(mutex);
```

In this situation :

- a) a deadlock will occur
- b) processes will starve to enter critical section
- c) several processes maybe executing in their critical section
- d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

8. All processes share a semaphore variable **mutex**, initialized to 1. Each process must execute wait(mutex) before entering the critical section and signal(mutex) afterward.

Suppose a process executes in the following manner.

```
wait(mutex);  
.....  
critical section  
.....  
wait(mutex);
```

- a) a deadlock will occur
- b) processes will starve to enter critical section
- c) several processes maybe executing in their critical section
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

9. Consider the methods used by processes P1 and P2 for accessing their critical sections whenever needed, as given below. The initial values of shared boolean variables S1 and S2 are randomly assigned. (GATE 2010)

```
Method used by P1 :  
while(S1==S2);  
Critical section  
S1 = S2;
```

```
Method used by P2 :  
while(S1!=S2);  
Critical section  
S2 = not(S1);
```

Which of the following statements describes properties achieved?

- a) Mutual exclusion but not progress
- b) Progress but not mutual exclusion
- c) Neither mutual exclusion nor progress
- d) Both mutual exclusion and progress

[View Answer](#)

Answer: d

1. A monitor is a type of _____

- a) semaphore
- b) low level synchronization construct
- c) high level synchronization construct
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. A monitor is characterized by _____

- a) a set of programmer defined operators
- b) an identifier
- c) the number of variables in it
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. A procedure defined within a _____ can access only those variables declared locally within the _____ and its formal parameters.

- a) process, semaphore
- b) process, monitor
- c) semaphore, semaphore
- d) monitor, monitor

[View Answer](#)

Answer: d

Explanation: None.

4. The monitor construct ensures that _____

- a) only one process can be active at a time within the monitor
- b) n number of processes can be active at a time within the monitor (n being greater than 1)
- c) the queue has only one process in it at a time
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. What are the operations that can be invoked on a condition variable?

- a) wait & signal
- b) hold & wait
- c) signal & hold
- d) continue & signal

[View Answer](#)

Answer: a

Explanation: None.

6. Which is the process of invoking the wait operation?

- a) suspended until another process invokes the signal operation
- b) waiting for another process to complete before it can itself call the signal operation
- c) stopped until the next process in the queue finishes execution

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. If no process is suspended, the signal operation _____

- a) puts the system into a deadlock state
- b) suspends some default process execution
- c) nothing happens
- d) the output is unpredictable

[View Answer](#)

Answer: c

1. What is a reusable resource?

- a) that can be used by one process at a time and is not depleted by that use
- b) that can be used by more than one process at a time
- c) that can be shared between various threads
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. Which of the following condition is required for a deadlock to be possible?

- a) mutual exclusion
- b) a process may hold allocated resources while awaiting assignment of other resources
- c) no resource can be forcibly removed from a process holding it
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

3. A system is in the safe state if _____

- a) the system can allocate resources to each process in some order and still avoid a deadlock
- b) there exist a safe sequence
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. The circular wait condition can be prevented by _____

- a) defining a linear ordering of resource types
- b) using thread
- c) using pipes

d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. Which one of the following is the deadlock avoidance algorithm?

a) banker's algorithm

b) round-robin algorithm

c) elevator algorithm

d) karn's algorithm

[View Answer](#)

Answer: a

Explanation: None.

6. What is the drawback of banker's algorithm?

a) in advance processes rarely know how much resource they will need

b) the number of processes changes as time progresses

c) resource once available can disappear

d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

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

a) every time a resource request is made

b) at fixed time intervals

c) every time a resource request is made at fixed time intervals

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

8. A problem encountered in multitasking when a process is perpetually denied necessary resources is called _____

a) deadlock

b) starvation

c) inversion

d) aging

[View Answer](#)

Answer: b

Explanation: None.

9. Which one of the following is a visual (mathematical) way to determine the deadlock occurrence?

a) resource allocation graph

b) starvation graph

- c) inversion graph
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. To avoid deadlock _____

- a) there must be a fixed number of resources to allocate
- b) resource allocation must be done only once
- c) all deadlocked processes must be aborted
- d) inversion technique can be used

[View Answer](#)

Answer: a

1. The number of resources requested by a process _____

- a) must always be less than the total number of resources available in the system
- b) must always be equal to the total number of resources available in the system
- c) must not exceed the total number of resources available in the system
- d) must exceed the total number of resources available in the system

[View Answer](#)

Answer: c

Explanation: None.

2. The request and release of resources are _____

- a) command line statements
- b) interrupts
- c) system calls
- d) special programs

[View Answer](#)

Answer: c

Explanation: None.

3. What are Multithreaded programs?

- a) lesser prone to deadlocks
- b) more prone to deadlocks
- c) not at all prone to deadlocks
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: Multiple threads can compete for shared resources.

4. For a deadlock to arise, which of the following conditions must hold simultaneously?

- a) Mutual exclusion
- b) No preemption
- c) Hold and wait

d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

5. For Mutual exclusion to prevail in the system _____

- a) at least one resource must be held in a non sharable mode
- b) the processor must be a uniprocessor rather than a multiprocessor
- c) there must be at least one resource in a sharable mode
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: If another process requests that resource (non – shareable resource), the requesting process must be delayed until the resource has been released.

6. For a Hold and wait condition to prevail _____

- a) A process must be not be holding a resource, but waiting for one to be freed, and then request to acquire it
- b) A process must be holding at least one resource and waiting to acquire additional resources that are being held by other processes
- c) A process must hold at least one resource and not be waiting to acquire additional resources
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. Deadlock prevention is a set of methods _____

- a) to ensure that at least one of the necessary conditions cannot hold
- b) to ensure that all of the necessary conditions do not hold
- c) to decide if the requested resources for a process have to be given or not
- d) to recover from a deadlock

[View Answer](#)

Answer: a

Explanation: None.

8. For non sharable resources like a printer, mutual exclusion _____

- a) must exist
- b) must not exist
- c) may exist
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: A printer cannot be simultaneously shared by several processes.

9. For sharable resources, mutual exclusion _____

- a) is required
- b) is not required
- c) may be or may not be required
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: They do not require mutually exclusive access, and hence cannot be involved in a deadlock.

10. To ensure that the hold and wait condition never occurs in the system, it must be ensured that _____

- a) whenever a resource is requested by a process, it is not holding any other resources
- b) each process must request and be allocated all its resources before it begins its execution
- c) a process can request resources only when it has none
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: c – A process may request some resources and use them. Before it can request any additional resources, however it must release all the resources that it is currently allocated.

11. The disadvantage of a process being allocated all its resources before beginning its execution is _____

- a) Low CPU utilization
- b) Low resource utilization
- c) Very high resource utilization
- d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

12. To ensure no preemption, if a process is holding some resources and requests another resource that cannot be immediately allocated to it _____

- a) then the process waits for the resources be allocated to it
- b) the process keeps sending requests until the resource is allocated to it
- c) the process resumes execution without the resource being allocated to it
- d) then all resources currently being held are preempted

[View Answer](#)

Answer: d

Explanation: None.

13. One way to ensure that the circular wait condition never holds is to _____

- a) impose a total ordering of all resource types and to determine whether one

precedes another in the ordering

b) to never let a process acquire resources that are held by other processes

c) to let a process wait for only one resource at a time

d) all of the mentioned

[View Answer](#)

Answer: a

1. Each request requires that the system consider the _____ to decide whether the current request can be satisfied or must wait to avoid a future possible deadlock.

a) resources currently available

b) processes that have previously been in the system

c) resources currently allocated to each process

d) future requests and releases of each process

[View Answer](#)

Answer: a

Explanation: None.

2. Given a priori information about the _____ number of resources of each type that maybe requested for each process, it is possible to construct an algorithm that ensures that the system will never enter a deadlock state.

a) minimum

b) average

c) maximum

d) approximate

[View Answer](#)

Answer: c

Explanation: None.

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

a) resource allocation state

b) system storage state

c) operating system

d) resources

[View Answer](#)

Answer: a

Explanation: Resource allocation states are used to maintain the availability of the already and current available resources.

4. A state is safe, if _____

a) the system does not crash due to deadlock occurrence

b) the system can allocate resources to each process in some order and still avoid a deadlock

c) the state keeps the system protected and safe

d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. A system is in a safe state only if there exists a _____

a) safe allocation

b) safe resource

c) safe sequence

d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. All unsafe states are _____

a) deadlocks

b) not deadlocks

c) fatal

d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. A system has 12 magnetic tape drives and 3 processes : P0, P1, and P2. Process P0 requires 10 tape drives, P1 requires 4 and P2 requires 9 tape drives.

```
Process
P0
P1
P2

Maximum needs (process-wise: P0 through P2 top to bottom)
10
4
9

Currently allocated (process-wise)
5
2
2
```

Which of the following sequence is a safe sequence?

a) P0, P1, P2

b) P1, P2, P0

c) P2, P0, P1

d) P1, P0, P2

[View Answer](#)

Answer: d

Explanation: None.

8. If no cycle exists in the resource allocation graph _____

- a) then the system will not be in a safe state
- b) then the system will be in a safe state
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. The resource allocation graph is not applicable to a resource allocation system _____

- a) with multiple instances of each resource type
- b) with a single instance of each resource type
- c) single & multiple instances of each resource type
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. The Banker's algorithm is _____ than the resource allocation graph algorithm.

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

[View Answer](#)

Answer: a

Explanation: None.

11. The data structures available in the Banker's algorithm are _____

- a) Available
- b) Need
- c) Allocation
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

12. The content of the matrix Need is _____

- a) Allocation – Available
- b) Max – Available
- c) Max – Allocation
- d) Allocation – Max

[View Answer](#)

Answer: c

Explanation: None.

13. A system with 5 processes P0 through P4 and three resource types A, B, C have A with 10 instances, B with 5 instances, and C with 7 instances. At time t0, the following snapshot has been taken:

```

Process
P0
P1
P2
P3
P4

Allocation (process-wise : P0 through P4 top TO bottom)
A   B   C
0   1   0
2   0   0
3   0   2
2   1   1
0   0   2

MAX (process-wise: P0 through P4 top TO bottom)
A   B   C
7   5   3
3   2   2
9   0   2
2   2   2
4   3   3

Available
A   B   C
3   3   2

```

The sequence <P1, P3, P4, P2, P0> leads the system to _____

- a) an unsafe state
- b) a safe state
- c) a protected state
- d) a deadlock

[View Answer](#)

Answer: b

1. The wait-for graph is a deadlock detection algorithm that is applicable when _____

- a) all resources have a single instance
- b) all resources have multiple instances
- c) all resources have a single 7 multiple instances
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. An edge from process Pi to Pj in a wait for graph indicates that _____

- a) Pi is waiting for Pj to release a resource that Pi needs
- b) Pj is waiting for Pi to release a resource that Pj needs

- c) P_i is waiting for P_j to leave the system
- d) P_j is waiting for P_i to leave the system

[View Answer](#)

Answer: a

Explanation: None.

3. If the wait for graph contains a cycle _____

- a) then a deadlock does not exist
- b) then a deadlock exists
- c) then the system is in a safe state
- d) either deadlock exists or system is in a safe state

[View Answer](#)

Answer: b

Explanation: None.

4. If deadlocks occur frequently, the detection algorithm must be invoked _____

- a) rarely
- b) frequently
- c) rarely & frequently
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. What is the disadvantage of invoking the detection algorithm for every request?

- a) overhead of the detection algorithm due to consumption of memory
- b) excessive time consumed in the request to be allocated memory
- c) considerable overhead in computation time
- d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. A deadlock eventually cripples system throughput and will cause the CPU utilization to _____

- a) increase
- b) drop
- c) stay still
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. Every time a request for allocation cannot be granted immediately, the detection algorithm is invoked. This will help identify _____

- a) the set of processes that have been deadlocked

- b) the set of processes in the deadlock queue
- c) the specific process that caused the deadlock
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 tape drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is?

- a) 2
- b) 3
- c) 4
- d) 1

[View Answer](#)

Answer: a

Explanation: None.

9. A system has 3 processes sharing 4 resources. If each process needs a maximum of 2 units then, deadlock _____

- a) can never occur
- b) may occur
- c) has to occur
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. 'm' processes share 'n' resources of the same type. The maximum need of each process doesn't exceed 'n' and the sum of all their maximum needs is always less than m+n. In this setup, deadlock _____

- a) can never occur
- b) may occur
- c) has to occur
- d) none of the mentioned

[View Answer](#)

Answer: a

1. A deadlock can be broken by _____

- a) abort one or more processes to break the circular wait
- b) abort all the process in the system
- c) preempt all resources from all processes
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. The two ways of aborting processes and eliminating deadlocks are _____

- a) Abort all deadlocked processes
- b) Abort all processes
- c) Abort one process at a time until the deadlock cycle is eliminated
- d) All of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. Those processes should be aborted on occurrence of a deadlock, the termination of which?

- a) is more time consuming
- b) incurs minimum cost
- c) safety is not hampered
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. The process to be aborted is chosen on the basis of the following factors?

- a) priority of the process
- b) process is interactive or batch
- c) how long the process has computed
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

5. Cost factors for process termination include _____

- a) Number of resources the deadlock process is not holding
- b) CPU utilization at the time of deadlock
- c) Amount of time a deadlocked process has thus far consumed during its execution
- d) All of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. If we preempt a resource from a process, the process cannot continue with its normal execution and it must be _____

- a) aborted
- b) rolled back
- c) terminated
- d) queued

[View Answer](#)

Answer: b

Explanation: None.

7. To _____ to a safe state, the system needs to keep more information about the states of processes.

- a) abort the process
- b) roll back the process
- c) queue the process
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

8. If the resources are always preempted from the same process _____ can occur.

- a) deadlock
- b) system crash
- c) aging
- d) starvation

[View Answer](#)

Answer: d

Explanation: None.

9. What is the solution to starvation?

- a) the number of rollbacks must be included in the cost factor
- b) the number of resources must be included in resource preemption
- c) resource preemption be done instead
- d) all of the mentioned

[View Answer](#)

Answer: a

1. What is Address Binding?

- a) going to an address in memory
- b) locating an address with the help of another address
- c) binding two addresses together to form a new address in a different memory space
- d) a mapping from one address space to another

[View Answer](#)

Answer: d

Explanation: None.

2. Binding of instructions and data to memory addresses can be done at _____

- a) Compile time
- b) Load time
- c) Execution time
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

3. If the process can be moved during its execution from one memory segment to another, then binding must be _____

- a) delayed until run time
- b) preponed to compile time
- c) preponed to load time
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. What is Dynamic loading?

- a) loading multiple routines dynamically
- b) loading a routine only when it is called
- c) loading multiple routines randomly
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. What is the advantage of dynamic loading?

- a) A used routine is used multiple times
- b) An unused routine is never loaded
- c) CPU utilization increases
- d) All of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

6. The idea of overlays is to _____

- a) data that are needed at any given time
- b) enable a process to be larger than the amount of memory allocated to it
- c) keep in memory only those instructions
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

7. The _____ must design and program the overlay structure.

- a) programmer
- b) system architect
- c) system designer
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. The _____ swaps processes in and out of the memory.

- a) Memory manager
- b) CPU
- c) CPU manager
- d) User

[View Answer](#)

Answer: a

Explanation: None.

9. If a higher priority process arrives and wants service, the memory manager can swap out the lower priority process to execute the higher priority process. When the higher priority process finishes, the lower priority process is swapped back in and continues execution. This variant of swapping is sometimes called?

- a) priority swapping
- b) pull out, push in
- c) roll out, roll in
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

10. If binding is done at assembly or load time, then the process _____ be moved to different locations after being swapped out and in again.

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

[View Answer](#)

Answer: c

Explanation: None.

11. In a system that does not support swapping _____

- a) the compiler normally binds symbolic addresses (variables) to relocatable addresses
- b) the compiler normally binds symbolic addresses to physical addresses
- c) the loader binds relocatable addresses to physical addresses
- d) binding of symbolic addresses to physical addresses normally takes place during execution

[View Answer](#)

Answer: a

Explanation: None.

12. Which of the following is TRUE?

- a) Overlays are used to increase the size of physical memory
- b) Overlays are used to increase the logical address space
- c) When overlays are used, the size of a process is not limited to the size of the

physical memory

d) Overlays are used whenever the physical address space is smaller than the logical address space

[View Answer](#)

Answer: c

1. The address generated by the CPU is referred to as _____

a) Physical address

b) Logical address

c) Neither physical nor logical

d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. The address loaded into the memory address register of the memory is referred to as _____

a) Physical address

b) Logical address

c) Neither physical nor logical

d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. The run time mapping from virtual to physical addresses is done by a hardware device called the _____

a) Virtual to physical mapper

b) Memory management unit

c) Memory mapping unit

d) None of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. The base register is also known as the _____

a) basic register

b) regular register

c) relocation register

d) delocation register

[View Answer](#)

Answer: c

Explanation: None.

5. The size of a process is limited to the size of _____

a) physical memory

- b) external storage
- c) secondary storage
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. If execution time binding is being used, then a process _____ be swapped to a different memory space.

- a) has to be
- b) can never
- c) must
- d) may

[View Answer](#)

Answer: d

Explanation: None.

7. Swapping requires a _____

- a) motherboard
- b) keyboard
- c) monitor
- d) backing store

[View Answer](#)

Answer: d

Explanation: None.

8. The backing store is generally a _____

- a) fast disk
- b) disk large enough to accommodate copies of all memory images for all users
- c) disk to provide direct access to the memory images
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

9. The _____ consists of all processes whose memory images are in the backing store or in memory and are ready to run.

- a) wait queue
- b) ready queue
- c) cpu
- d) secondary storage

[View Answer](#)

Answer: b

Explanation: None.

10. The _____ time in a swap out of a running process and swap in of a new process into the memory is very high.

- a) context – switch
- b) waiting
- c) execution
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

11. The major part of swap time is _____ time.

- a) waiting
- b) transfer
- c) execution
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

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

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

[View Answer](#)

Answer: c

Explanation: None.

13. Swap space is allocated _____

- a) as a chunk of disk
- b) separate from a file system
- c) into a file system
- d) all of the mentioned

[View Answer](#)

Answer: a

1. CPU fetches the instruction from memory according to the value of _____

- a) program counter
- b) status register
- c) instruction register
- d) program status word

[View Answer](#)

Answer: a

Explanation: None.

2. A memory buffer used to accommodate a speed differential is called _____

- a) stack pointer
- b) cache
- c) accumulator
- d) disk buffer

[View Answer](#)

Answer: b

Explanation: None.

3. Which one of the following is the address generated by CPU?

- a) physical address
- b) absolute address
- c) logical address
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

4. Run time mapping from virtual to physical address is done by _____

- a) Memory management unit
- b) CPU
- c) PCI
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called?

- a) fragmentation
- b) paging
- c) mapping
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

6. The address of a page table in memory is pointed by _____

- a) stack pointer
- b) page table base register
- c) page register
- d) program counter

[View Answer](#)

Answer: b

Explanation: None.

7. Program always deals with _____

- a) logical address
- b) absolute address
- c) physical address
- d) relative address

[View Answer](#)

Answer: a

Explanation: None.

8. The page table contains _____

- a) base address of each page in physical memory
- b) page offset
- c) page size
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

9. What is compaction?

- a) a technique for overcoming internal fragmentation
- b) a paging technique
- c) a technique for overcoming external fragmentation
- d) a technique for overcoming fatal error

[View Answer](#)

Answer: c

Explanation: None.

10. Operating System maintains the page table for _____

- a) each process
- b) each thread
- c) each instruction
- d) each address

[View Answer](#)

Answer: a

1. The main memory accommodates _____

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

[View Answer](#)

Answer: a

Explanation: None.

2. What is the operating system?

- a) in the low memory

- b) in the high memory
- c) either low or high memory (depending on the location of interrupt vector)
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. In contiguous memory allocation _____

- a) each process is contained in a single contiguous section of memory
- b) all processes are contained in a single contiguous section of memory
- c) the memory space is contiguous
- d) none of the mentioned

[View Answer](#)

4. The relocation register helps in _____

- a) providing more address space to processes
- b) a different address space to processes
- c) to protect the address spaces of processes
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

5. With relocation and limit registers, each logical address must be _____ the limit register.

- a) less than
- b) equal to
- c) greater than
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

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

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

[View Answer](#)

Answer: d

Explanation: None.

7. Transient operating system code is code that _____

- a) is not easily accessible
- b) comes and goes as needed

- c) stays in the memory always
- d) never enters the memory space

[View Answer](#)

Answer: b

Explanation: None.

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

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

[View Answer](#)

Answer: c

Explanation: None.

9. When memory is divided into several fixed sized partitions, each partition may contain _____

- a) exactly one process
- b) at least one process
- c) multiple processes at once
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. In fixed size partition, the degree of multiprogramming is bounded by _____

- a) the number of partitions
- b) the CPU utilization
- c) the memory size
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None

11. The first fit, best fit and worst fit are strategies to select a _____

- a) process from a queue to put in memory
- b) processor to run the next process
- c) free hole from a set of available holes
- d) all of the mentioned

[View Answer](#)

Answer: c

1. In internal fragmentation, memory is internal to a partition and _____

- a) is being used

- b) is not being used
- c) is always used
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. A solution to the problem of external fragmentation is _____

- a) compaction
- b) larger memory space
- c) smaller memory space
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. Another solution to the problem of external fragmentation problem is to _____

- a) permit the logical address space of a process to be noncontiguous
- b) permit smaller processes to be allocated memory at last
- c) permit larger processes to be allocated memory at last
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. If relocation is static and is done at assembly or load time, compaction _____

- a) cannot be done
- b) must be done
- c) must not be done
- d) can be done

[View Answer](#)

Answer: a

Explanation: None.

5. The disadvantage of moving all process to one end of memory and all holes to the other direction, producing one large hole of available memory is _____

- a) the cost incurred
- b) the memory used
- c) the CPU used
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. _____ is generally faster than _____ and _____

- a) first fit, best fit, worst fit
- b) best fit, first fit, worst fit
- c) worst fit, best fit, first fit
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. External fragmentation exists when?

- a) enough total memory exists to satisfy a request but it is not contiguous
- b) the total memory is insufficient to satisfy a request
- c) a request cannot be satisfied even when the total memory is free
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. External fragmentation will not occur when?

- a) first fit is used
- b) best fit is used
- c) worst fit is used
- d) no matter which algorithm is used, it will always occur

[View Answer](#)

Answer: d

Explanation: None.

9. Sometimes the overhead of keeping track of a hole might be _____

- a) larger than the memory
- b) larger than the hole itself
- c) very small
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

10. When the memory allocated to a process is slightly larger than the process, then _____

- a) internal fragmentation occurs
- b) external fragmentation occurs
- c) both internal and external fragmentation occurs
- d) neither internal nor external fragmentation occurs

[View Answer](#)

Answer: a

1. Physical memory is broken into fixed-sized blocks called _____

- a) frames
- b) pages
- c) backing store
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. Logical memory is broken into blocks of the same size called _____

- a) frames
- b) pages
- c) backing store
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. Every address generated by the CPU is divided into two parts. They are _____

- a) frame bit & page number
- b) page number & page offset
- c) page offset & frame bit
- d) frame offset & page offset

[View Answer](#)

Answer: b

Explanation: None.

4. The _____ is used as an index into the page table.

- a) frame bit
- b) page number
- c) page offset
- d) frame offset

[View Answer](#)

Answer: b

Explanation: None.

5. The _____ table contains the base address of each page in physical memory.

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

[View Answer](#)

Answer: c

Explanation: None.

6. The size of a page is typically _____

- a) varied
- b) power of 2
- c) power of 4
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. If the size of logical address space is 2 to the power of m, and a page size is 2 to the power of n addressing units, then the high order ____ bits of a logical address designate the page number, and the ____ low order bits designate the page offset.

- a) m, n
- b) n, m
- c) m – n, m
- d) m – n, n

[View Answer](#)

Answer: d

Explanation: None.

8. With paging there is no _____ fragmentation.

- a) internal
- b) external
- c) either type of
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. 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) page
- b) mapping
- c) frame
- d) memory

[View Answer](#)

Answer: c

Explanation: None.

10. Paging increases the _____ time.

- a) waiting
- b) execution
- c) context – switch
- d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

11. Smaller page tables are implemented as a set of _____

- a) queues
- b) stacks
- c) counters
- d) registers

[View Answer](#)

Answer: d

Explanation: None.

12. The page table registers should be built with _____

- a) very low speed logic
- b) very high speed logic
- c) a large memory space
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

13. For larger page tables, they are kept in main memory and a _____ points to the page table.

- a) page table base register
- b) page table base pointer
- c) page table register pointer
- d) page table base

[View Answer](#)

Answer: a

Explanation: None.

14. For every process there is a _____

- a) page table
- b) copy of page table
- c) pointer to page table
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

15. Time taken in memory access through PTBR is _____

- a) extended by a factor of 3
- b) extended by a factor of 2
- c) slowed by a factor of 3
- d) slowed by a factor of 2

[View Answer](#)

Answer: d

1. Each entry in a translation lookaside buffer (TLB) consists of _____

- a) key
- b) value
- c) bit value
- d) constant

[View Answer](#)

Answer: a

Explanation: None.

2. If a page number is not found in the TLB, then it is known as a _____

- a) TLB miss
- b) Buffer miss
- c) TLB hit
- d) All of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. An _____ uniquely identifies processes and is used to provide address space protection for that process.

- a) address space locator
- b) address space identifier
- c) address process identifier
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. The percentage of times a page number is found in the TLB is known as _____

- a) miss ratio
- b) hit ratio
- c) miss percent
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. Memory protection in a paged environment is accomplished by _____

- a) protection algorithm with each page
- b) restricted access rights to users
- c) restriction on page visibility
- d) protection bit with each page

[View Answer](#)

Answer: d

Explanation: None.

6. When the valid – invalid bit is set to valid, it means that the associated page

-
- a) is in the TLB
 - b) has data in it
 - c) is in the process's logical address space
 - d) is the system's physical address space

[View Answer](#)

Answer: c

Explanation: None.

7. Illegal addresses are trapped using the _____ bit.

- a) error
- b) protection
- c) valid – invalid
- d) access

[View Answer](#)

Answer: c

Explanation: None.

8. When there is a large logical address space, the best way of paging would be

-
- a) not to page
 - b) a two level paging algorithm
 - c) the page table itself
 - d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. In a paged memory, the page hit ratio is 0.35. The required to access a page in secondary memory is equal to 100 ns. The time required to access a page in primary memory is 10 ns. The average time required to access a page is?

- a) 3.0 ns
- b) 68.0 ns
- c) 68.5 ns
- d) 78.5 ns

[View Answer](#)

Answer: c

Explanation: None.

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

[View Answer](#)

Answer: d

Explanation: None.

11. In paged memory systems, if the page size is increased, then the internal fragmentation generally _____

- a) becomes less
- b) becomes more
- c) remains constant
- d) none of the mentioned

[View Answer](#)

Answer: b

1. In segmentation, each address is specified by _____

- a) a segment number & offset
- b) an offset & value
- c) a value & segment number
- d) a key & value

[View Answer](#)

Answer: a

Explanation: None.

2. In paging the user provides only _____ which is partitioned by the hardware into _____ and _____

- a) one address, page number, offset
- b) one offset, page number, address
- c) page number, offset, address
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

3. Each entry in a segment table has a _____

- a) segment base
- b) segment peak
- c) segment value
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. The segment base contains the _____
- a) starting logical address of the process
 - b) starting physical address of the segment in memory
 - c) segment length
 - d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. The segment limit contains the _____
- a) starting logical address of the process
 - b) starting physical address of the segment in memory
 - c) segment length
 - d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. The offset 'd' of the logical address must be _____
- a) greater than segment limit
 - b) between 0 and segment limit
 - c) between 0 and the segment number
 - d) greater than the segment number

[View Answer](#)

Answer: b

Explanation: None.

7. If the offset is legal _____
- a) it is used as a physical memory address itself
 - b) it is subtracted from the segment base to produce the physical memory address
 - c) it is added to the segment base to produce the physical memory address
 - d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. When the entries in the segment tables of two different processes point to the same physical location _____
- a) the segments are invalid
 - b) the processes get blocked
 - c) segments are shared
 - d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

9. The protection bit is 0/1 based on _____

- a) write only
- b) read only
- c) read – write
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

10. If there are 32 segments, each of size 1Kb, then the logical address should have _____

- a) 13 bits
- b) 14 bits
- c) 15 bits
- d) 16 bits

[View Answer](#)

Answer: a

Explanation: To specify a particular segment, 5 bits are required. To select a particular byte after selecting a page, 10 more bits are required. Hence 15 bits are required.

11. Consider a computer with 8 Mbytes of main memory and a 128K cache. The cache block size is 4 K. It uses a direct mapping scheme for cache management. How many different main memory blocks can map onto a given physical cache block?

- a) 2048
- b) 256
- c) 64
- d) 8

[View Answer](#)

Answer: c

Explanation: None.

12. A multilevel page table is preferred in comparison to a single level page table for translating virtual address to physical address because _____

- a) it reduces the memory access time to read or write a memory location
- b) it helps to reduce the size of page table needed to implement the virtual address space of a process
- c) it is required by the translation lookaside buffer
- d) it helps to reduce the number of page faults in page replacement algorithms

[View Answer](#)

Answer: b

1. If one or more devices use a common set of wires to communicate with the computer system, the connection is called _____

- a) CPU

- b) Monitor
- c) Wirefull
- d) Bus

[View Answer](#)

Answer: d

Explanation: None.

2. A ____ a set of wires and a rigidly defined protocol that specifies a set of messages that can be sent on the wires.

- a) port
- b) node
- c) bus
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. When device A has a cable that plugs into device B, and device B has a cable that plugs into device C and device C plugs into a port on the computer, this arrangement is called a _____

- a) port
- b) daisy chain
- c) bus
- d) cable

[View Answer](#)

Answer: b

Explanation: None.

4. The _____ present 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) Devices
- b) Buses
- c) Device drivers
- d) I/O systems

[View Answer](#)

Answer: c

Explanation: None.

5. A _____ is a collection of electronics that can operate a port, a bus, or a device.

- a) controller
- b) driver
- c) host
- d) bus

[View Answer](#)

Answer: a

Explanation: None.

6. An I/O port typically consists of four registers status, control, _____ and _____ registers.

- a) system in, system out
- b) data in, data out
- c) flow in, flow out
- d) input, output

[View Answer](#)

Answer: b

Explanation: None.

7. The _____ register is read by the host to get input.

- a) flow in
- b) flow out
- c) data in
- d) data out

[View Answer](#)

Answer: c

Explanation: None.

8. The _____ register is written by the host to send output.

- a) status
- b) control
- c) data in
- d) data out

[View Answer](#)

Answer: d

Explanation: None.

9. The hardware mechanism that allows a device to notify the CPU is called _____

- a) polling
- b) interrupt
- c) driver
- d) controlling

[View Answer](#)

Answer: b

Explanation: None.

10. The CPU hardware has a wire called _____ that the CPU senses after executing every instruction.

- a) interrupt request line
- b) interrupt bus
- c) interrupt receive line

d) interrupt sense line

[View Answer](#)

Answer: a

Explanation: None.

11. The _____ determines the cause of the interrupt, performs the necessary processing and executes a return from the interrupt instruction to return the CPU to the execution state prior to the interrupt.

a) interrupt request line

b) device driver

c) interrupt handler

d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

12. In general the two interrupt request lines are _____

a) maskable & non maskable interrupts

b) blocked & non maskable interrupts

c) maskable & blocked interrupts

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

13. The _____ are reserved for events such as unrecoverable memory errors.

a) non maskable interrupts

b) blocked interrupts

c) maskable interrupts

d) none of the mentioned

[View Answer](#)

Answer: a

1. The _____ can be turned off by the CPU before the execution of critical instruction sequences that must not be interrupted.

a) nonmaskable interrupt

b) blocked interrupt

c) maskable interrupt

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. The _____ is used by device controllers to request service.

a) nonmaskable interrupt

b) blocked interrupt

- c) maskable interrupt
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. The interrupt vector contains _____

- a) the interrupts
- b) the memory addresses of specialized interrupt handlers
- c) the identifiers of interrupts
- d) the device addresses

[View Answer](#)

Answer: b

Explanation: None.

4. Division by zero, accessing a protected or non existent memory address, or attempting to execute a privileged instruction from user mode are all categorized as _____

- a) errors
- b) exceptions
- c) interrupt handlers
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. For large data transfers, _____ is used.

- a) dma
- b) programmed I/O
- c) controller register
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. A character stream device transfers _____

- a) bytes one by one
- b) block of bytes as a unit
- c) with unpredictable response times
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. A block device transfers _____

- a) bytes one by one

- b) block of bytes as a unit
- c) with unpredictable response times
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

8. What is a dedicated device?

- a) opposite to a sharable device
- b) same as a sharable device
- c) can be used concurrently by several processes
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

9. A keyboard is an example of a device that is accessed through a _____ interface.

- a) block stream
- b) set of blocks
- c) character stream
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

10. In polling _____

- a) busy – wait cycles wait for I/O from device
- b) interrupt handler receives interrupts
- c) interrupt-request line is triggered by I/O device
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

11. A non blocking system call _____

- a) halts the execution of the application for an extended time
- b) does not halt the execution of the application
- c) does not block the interrupts
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

12. An asynchronous call _____

- a) returns immediately, without waiting for the I/O to complete

- b) does not return immediately and waits for the I/O to complete
- c) consumes a lot of time
- d) is too slow

[View Answer](#)

Answer: a

1. Buffering is done to _____
- a) cope with device speed mismatch
 - b) cope with device transfer size mismatch
 - c) maintain copy semantics
 - d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

2. Caching is _____ spooling.
- a) same as
 - b) not the same as
 - c) all of the mentioned
 - d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. Caching _____
- a) holds a copy of the data
 - b) is fast memory
 - c) holds the only copy of the data
 - d) holds output for a device

[View Answer](#)

Answer: a

Explanation: None.

4. Spooling _____
- a) holds a copy of the data
 - b) is fast memory
 - c) holds the only copy of the data
 - d) holds output for a device

[View Answer](#)

Answer: c

Explanation: None.

5. The _____ keeps state information about the use of I/O components.
- a) CPU
 - b) OS
 - c) kernel

d) shell

[View Answer](#)

Answer: c

Explanation: None.

6. The kernel data structures include _____

- a) process table
- b) open file table
- c) close file table
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. Windows NT uses a _____ implementation for I/O.

- a) message – passing
- b) draft – passing
- c) secondary memory
- d) cache

[View Answer](#)

Answer: a

Explanation: None.

8. A _____ is a full duplex connection between a device driver and a user level process.

- a) Bus
- b) I/O operation
- c) Stream
- d) Flow

[View Answer](#)

Answer: c

Explanation: None.

9. I/O is a _____ in system performance.

- a) major factor
- b) minor factor
- c) does not matter
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. If the number of cycles spent busy – waiting is not excessive, then _____

- a) interrupt driven I/O is more efficient than programmed I/O
- b) programmed I/O is more efficient than interrupt driven I/O
- c) both programmed and interrupt driven I/O are equally efficient

d) none of the mentioned

[View Answer](#)

Answer: b

1. What is the disadvantage of real addressing mode?

- a) there is a lot of cost involved
- b) time consumption overhead
- c) absence of memory protection between processes
- d) restricted access to memory locations by processes

[View Answer](#)

Answer: c

Explanation: None.

2. Preemptive, priority based scheduling guarantees _____

- a) hard real time functionality
- b) soft real time functionality
- c) protection of memory
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. Real time systems must have _____

- a) preemptive kernels
- b) non preemptive kernels
- c) preemptive kernels or non preemptive kernels
- d) neither preemptive nor non preemptive kernels

[View Answer](#)

Answer: a

Explanation: None.

4. What is Event latency?

- a) the amount of time an event takes to occur from when the system started
- b) the amount of time from the event occurrence till the system stops
- c) the amount of time from event occurrence till the event crashes
- d) the amount of time that elapses from when an event occurs to when it is serviced.

[View Answer](#)

Answer: d

Explanation: None.

5. Interrupt latency refers to the period of time _____

- a) from the occurrence of an event to the arrival of an interrupt
- b) from the occurrence of an event to the servicing of an interrupt
- c) from arrival of an interrupt to the start of the interrupt service routine

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. Real time systems need to _____ the interrupt latency.

a) minimize

b) maximize

c) not bother about

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. The amount of time required for the scheduling dispatcher to stop one process and start another is known as _____

a) event latency

b) interrupt latency

c) dispatch latency

d) context switch

[View Answer](#)

Answer: c

Explanation: None.

8. The most effective technique to keep dispatch latency low is to _____

a) provide non preemptive kernels

b) provide preemptive kernels

c) make it user programmed

d) run less number of processes at a time

[View Answer](#)

Answer: b

Explanation: None.

9. Priority inversion is solved by use of _____

a) priority inheritance protocol

b) two phase lock protocol

c) time protocol

d) all of the mentioned

[View Answer](#)

Answer: a

1. What is the disadvantage of real addressing mode?

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[View Answer](#)

Answer: c

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[View Answer](#)

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d) neither preemptive nor non preemptive kernels

[View Answer](#)

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Explanation: None.

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c) the amount of time from event occurrence till the event crashes

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[View Answer](#)

Answer: d

Explanation: None.

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c) from arrival of an interrupt to the start of the interrupt service routine

d) none of the mentioned

[View Answer](#)

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[View Answer](#)

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- b) interrupt latency
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- d) context switch

[View Answer](#)

Answer: c

Explanation: None.

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- b) provide preemptive kernels
- c) make it user programmed
- d) run less number of processes at a time

[View Answer](#)

Answer: b

Explanation: None.

9. Priority inversion is solved by use of _____

- a) priority inheritance protocol
- b) two phase lock protocol
- c) time protocol
- d) all of the mentioned

[View Answer](#)

Answer: a

. Earliest deadline first algorithm assigns priorities according to _____

- a) periods
- b) deadlines
- c) burst times
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35. The total CPU utilization is _____

- a) 0.90
- b) 0.74
- c) 0.94

d) 0.80

[View Answer](#)

Answer: c

Explanation: None.

3. A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35., the priorities of P1 and P2 are?

- a) remain the same throughout
- b) keep varying from time to time
- c) may or may not be change
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35., can the two processes be scheduled using the EDF algorithm without missing their respective deadlines?

- a) Yes
- b) No
- c) Maybe
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. Using EDF algorithm practically, it is impossible to achieve 100 percent utilization due to _____

- a) the cost of context switching
- b) interrupt handling
- c) power consumption
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. T shares of time are allocated among all processes out of N shares in _____ scheduling algorithm.

- a) rate monotonic
- b) proportional share
- c) earliest deadline first
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. If there are a total of $T = 100$ shares to be divided among three processes, A, B and C. A is assigned 50 shares, B is assigned 15 shares and C is assigned 20 shares. A will have _____ percent of the total processor time.

- a) 20
- b) 15
- c) 50
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

8. If there are a total of $T = 100$ shares to be divided among three processes, A, B and C. A is assigned 50 shares, B is assigned 15 shares and C is assigned 20 shares. B will have _____ percent of the total processor time.

- a) 20
- b) 15
- c) 50
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. If there are a total of $T = 100$ shares to be divided among three processes, A, B and C. A is assigned 50 shares, B is assigned 15 shares and C is assigned 20 shares. C will have _____ percent of the total processor time.

- a) 20
- b) 15
- c) 50
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. If there are a total of $T = 100$ shares to be divided among three processes, A, B and C. A is assigned 50 shares, B is assigned 15 shares and C is assigned 20 shares. If a new process D requested 30 shares, the admission controller would _____

- a) allocate 30 shares to it
- b) deny entry to D in the system
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: b

1. To schedule the processes, they are considered _____

- a) infinitely long
- b) periodic

- c) heavy weight
- d) light weight

[View Answer](#)

Answer: b

Explanation: None.

2. If the period of a process is 'p', then what is the rate of the task?

- a) p^2
- b) $2 \cdot p$
- c) $1/p$
- d) p

[View Answer](#)

Answer: c

Explanation: None.

3. The scheduler admits a process using _____

- a) two phase locking protocol
- b) admission control algorithm
- c) busy wait polling
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

4. The _____ scheduling algorithm schedules periodic tasks using a static priority policy with preemption.

- a) earliest deadline first
- b) rate monotonic
- c) first cum first served
- d) priority

[View Answer](#)

Answer: b

Explanation: None.

5. Rate monotonic scheduling assumes that the _____

- a) processing time of a periodic process is same for each CPU burst
- b) processing time of a periodic process is different for each CPU burst
- c) periods of all processes is the same
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. In rate monotonic scheduling, a process with a shorter period is assigned _____

- a) a higher priority

- b) a lower priority
- c) higher & lower priority
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. There are two processes P1 and P2, whose periods are 50 and 100 respectively. P1 is assigned higher priority than P2. The processing times are $t_1 = 20$ for P1 and $t_2 = 35$ for P2. Is it possible to schedule these tasks so that each meets its deadline using Rate monotonic scheduling?

- a) yes
- b) no
- c) maybe
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. If a set of processes cannot be scheduled by rate monotonic scheduling algorithm, then _____

- a) they can be scheduled by EDF algorithm
- b) they cannot be scheduled by EDF algorithm
- c) they cannot be scheduled by any other algorithm
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

9. A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35. The total CPU utilization is?

- a) 0.90
- b) 0.74
- c) 0.94
- d) 0.80

[View Answer](#)

Answer: c

Explanation: None.

10. A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35. Can the processes be scheduled without missing the deadlines?

- a) Yes
- b) No
- c) Maybe

d) None of the mentioned

[View Answer](#)

Answer: b

. I/O hardware contains _____

- a) Bus
- b) Controller
- c) I/O port and its registers
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

2. The data-in register of I/O port is _____

- a) Read by host to get input
- b) Read by controller to get input
- c) Written by host to send output
- d) Written by host to start a command

[View Answer](#)

Answer: a

Explanation: None.

3. The host sets _____ bit when a command is available for the controller to execute.

- a) write
- b) status
- c) command-ready
- d) control

[View Answer](#)

Answer: c

Explanation: None.

4. When hardware is accessed by reading and writing to the specific memory locations, then it is called _____

- a) port-mapped I/O
- b) controller-mapped I/O
- c) bus-mapped I/O
- d) none of the mentioned

[View Answer](#)

Answer: d

Explanation: It is called memory-mapped I/O.

5. Device drivers are implemented to interface _____

- a) character devices
- b) block devices
- c) network devices

d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

6. Which hardware triggers some operation after certain programmed count?

a) programmable interval timer

b) interrupt timer

c) programmable timer

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

7. The device-status table contains _____

a) each I/O device type

b) each I/O device address

c) each I/O device state

d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

8. Which buffer holds the output for a device?

a) spool

b) output

c) status

d) magic

[View Answer](#)

Answer: a

Explanation: None.

9. Which one of the following connects high-speed high-bandwidth device to memory subsystem and CPU.

a) Expansion bus

b) PCI bus

c) SCSI bus

d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. A process is moved to wait queue when I/O request is made with _____

a) non-blocking I/O

b) blocking I/O

c) asynchronous I/O

d) synchronous I/O

[View Answer](#)

Answer: b

1. In _____ information is recorded magnetically on platters.

a) magnetic disks

b) electrical disks

c) assemblies

d) cylinders

[View Answer](#)

Answer: a

Explanation: None.

2. The heads of the magnetic disk are attached to a _____ that moves all the heads as a unit.

a) spindle

b) disk arm

c) track

d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. The set of tracks that are at one arm position make up a _____

a) magnetic disks

b) electrical disks

c) assemblies

d) cylinders

[View Answer](#)

Answer: d

Explanation: None.

4. The time taken to move the disk arm to the desired cylinder is called the _____

a) positioning time

b) random access time

c) seek time

d) rotational latency

[View Answer](#)

Answer: c

Explanation: None.

5. The time taken for the desired sector to rotate to the disk head is called _____

a) positioning time

b) random access time

- c) seek time
- d) rotational latency

[View Answer](#)

Answer: d

Explanation: None.

6. When the head damages the magnetic surface, it is known as _____

- a) disk crash
- b) head crash
- c) magnetic damage
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. A floppy disk is designed to rotate _____ as compared to a hard disk drive.

- a) faster
- b) slower
- c) at the same speed
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

8. What is the host controller?

- a) controller built at the end of each disk
- b) controller at the computer end of the bus
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

9. _____ controller sends the command placed into it, via messages to the _____ controller.

- a) host, host
- b) disk, disk
- c) host, disk
- d) disk, host

[View Answer](#)

Answer: c

Explanation: None.

10. What is the disk bandwidth?

- a) the total number of bytes transferred
- b) total time between the first request for service and the completion on the last

transfer

- c) the total number of bytes transferred divided by the total time between the first request for service and the completion on the last transfer
- d) none of the mentioned

[View Answer](#)

Answer: c

1. Linux uses a time-sharing algorithm _____

- a) to pair preemptive scheduling between multiple processes
- b) for tasks where absolute priorities are more important than fairness
- c) all of the mentioned
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. The first linux kernel which supports the SMP hardware?

- a) linux 0.1
- b) linux 1.0
- c) linux 1.2
- d) linux 2.0

[View Answer](#)

Answer: d

Explanation: None.

3. Which one of the following linux file system does not support journaling feature?

- a) ext2
- b) ext3
- c) ext4
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. Which binary format is supported by linux?

- a) a.out
- b) elf
- c) both a.out and ELF
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

5. Which one of the following bootloader is not used by linux?

- a) GRUB
- b) LILO

- c) NTLDR
- d) None of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

6. The first process launched by the linux kernel is _____

- a) init process
- b) zombie process
- c) batch process
- d) boot process

[View Answer](#)

Answer: a

Explanation: None.

7. Which desktop environment is not used in any linux distribution?

- a) gnome
- b) kde
- c) unity
- d) none of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

8. Standard set of functions through which interacts with kernel is defined by _____

- a) system libraries
- b) kernel code
- c) compilers
- d) utility programs

[View Answer](#)

Answer: a

Explanation: None.

9. What is Linux?

- a) single user, single tasking
- b) single user, multitasking
- c) multi user, single tasking
- d) multi user, multitasking

[View Answer](#)

Answer: d

Explanation: None.

10. Which one of the following is not a linux distribution?

- a) debian
- b) gentoo

- c) open SUSE
- d) multics

[View Answer](#)

Answer: d

1. Which one of the following is not shared by threads?

- a) program counter
- b) stack
- c) both program counter and stack
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. A process can be _____

- a) single threaded
- b) multithreaded
- c) both single threaded and multithreaded
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. If one thread opens a file with read privileges then _____

- a) other threads in the another process can also read from that file
- b) other threads in the same process can also read from that file
- c) any other thread can not read from that file
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. The time required to create a new thread in an existing process is _____

- a) greater than the time required to create a new process
- b) less than the time required to create a new process
- c) equal to the time required to create a new process
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

5. When the event for which a thread is blocked occurs?

- a) thread moves to the ready queue
- b) thread remains blocked
- c) thread completes

d) a new thread is provided

[View Answer](#)

Answer: a

Explanation: None.

6. The jacketing technique is used to _____

a) convert a blocking system call into non blocking system call

b) create a new thread

c) communicate between threads

d) terminate a thread

[View Answer](#)

Answer: a

Explanation: None.

7. Termination of the process terminates _____

a) first thread of the process

b) first two threads of the process

c) all threads within the process

d) no thread within the process

[View Answer](#)

Answer: c

Explanation: None.

8. Which one of the following is not a valid state of a thread?

a) running

b) parsing

c) ready

d) blocked

[View Answer](#)

Answer: b

Explanation: None.

9. The register context and stacks of a thread are deallocated when the thread?

a) terminates

b) blocks

c) unblocks

d) spawns

[View Answer](#)

Answer: a

Explanation: None.

10. Thread synchronization is required because _____

a) all threads of a process share the same address space

b) all threads of a process share the same global variables

c) all threads of a process can share the same files

d) all of the mentioned

[View Answer](#)

Answer: d

1. A thread is also called _____

- a) Light Weight Process(LWP)
- b) Heavy Weight Process(HWP)
- c) Process
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. A thread shares its resources(like data section, code section, open files, signals) with _____

- a) other process similar to the one that the thread belongs to
- b) other threads that belong to similar processes
- c) other threads that belong to the same process
- d) all of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

3. A heavy weight process _____

- a) has multiple threads of execution
- b) has a single thread of execution
- c) can have multiple or a single thread for execution
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. A process having multiple threads of control implies _____

- a) it can do more than one task at a time
- b) it can do only one task at a time, but much faster
- c) it has to use only one thread per process
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. Multithreading an interactive program will increase responsiveness to the user by _____

- a) continuing to run even if a part of it is blocked
- b) waiting for one part to finish before the other begins
- c) asking the user to decide the order of multithreading

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. Resource sharing helps _____

a) share the memory and resources of the process to which the threads belong

b) an application have several different threads of activity all within the same address space

c) reduce the address space that a process could potentially use

d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

7. Multithreading on a multi – CPU machine _____

a) decreases concurrency

b) increases concurrency

c) doesn't affect the concurrency

d) can increase or decrease the concurrency

[View Answer](#)

Answer: b

Explanation: None.

8. The kernel is _____ of user threads.

a) a part of

b) the creator of

c) unaware of

d) aware of

[View Answer](#)

Answer: c

Explanation: None.

9. If the kernel is single threaded, then any user level thread performing a blocking system call will _____

a) cause the entire process to run along with the other threads

b) cause the thread to block with the other threads running

c) cause the entire process to block even if the other threads are available to run

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

10. Because the kernel thread management is done by the Operating System itself _____

a) kernel threads are faster to create than user threads

- b) kernel threads are slower to create than user threads
- c) kernel threads are easier to manage as well as create than user threads
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

11. If a kernel thread performs a blocking system call, _____

- a) the kernel can schedule another thread in the application for execution
- b) the kernel cannot schedule another thread in the same application for execution
- c) the kernel must schedule another thread of a different application for execution
- d) the kernel must schedule another thread of the same application on a different processor

[View Answer](#)

Answer: a

Explanation: None.

12. Which of the following is FALSE?

- a) Context switch time is longer for kernel level threads than for user level threads
- b) User level threads do not need any hardware support
- c) Related kernel level threads can be scheduled on different processors in a multiprocessor system
- d) Blocking one kernel level thread blocks all other related threads

[View Answer](#)

Answer: d

1. The model in which one kernel thread is mapped to many user-level threads is called _____

- a) Many to One model
- b) One to Many model
- c) Many to Many model
- d) One to One model

[View Answer](#)

Answer: a

Explanation: None.

2. The model in which one user-level thread is mapped to many kernel level threads is called _____

- a) Many to One model
- b) One to Many model
- c) Many to Many model
- d) One to One model

[View Answer](#)

Answer: b

Explanation: None.

3. In the Many to One model, if a thread makes a blocking system call _____

- a) the entire process will be blocked
- b) a part of the process will stay blocked, with the rest running
- c) the entire process will run
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

4. In the Many to One model, multiple threads are unable to run in parallel on multiprocessors because of _____

- a) only one thread can access the kernel at a time
- b) many user threads have access to just one kernel thread
- c) there is only one kernel thread
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. The One to One model allows _____

- a) increased concurrency
- b) decreased concurrency
- c) increased or decreased concurrency
- d) concurrency equivalent to other models

[View Answer](#)

Answer: a

Explanation: None.

6. In the One to One model when a thread makes a blocking system call _____

- a) other threads are strictly prohibited from running
- b) other threads are allowed to run
- c) other threads only from other processes are allowed to run
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. Which of the following is the drawback of the One to One Model?

- a) increased concurrency provided by this model
- b) decreased concurrency provided by this model
- c) creating so many threads at once can crash the system
- d) creating a user thread requires creating the corresponding kernel thread

[View Answer](#)

Answer: d

Explanation: None.

8. When is the Many to One model at an advantage?

- a) When the program does not need multithreading
- b) When the program has to be multi-threaded
- c) When there is a single processor
- d) None of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

9. In the Many to Many model true concurrency cannot be gained because

-
- a) the kernel can schedule only one thread at a time
 - b) there are too many threads to handle
 - c) it is hard to map threads with each other
 - d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

10. In the Many to Many models when a thread performs a blocking system call

-
- a) other threads are strictly prohibited from running
 - b) other threads are allowed to run
 - c) other threads only from other processes are allowed to run
 - d) none of the mentioned

[View Answer](#)

Answer: b

1. Which of the following system calls does not return control to the calling point, on termination?

- a) fork
- b) exec
- c) ioctl
- d) longjmp

[View Answer](#)

Answer: b

Explanation: None.

2. The following program results in the creation of?

```
main()
{
    if(fork()>0)
        sleep(100);
}
```

- a) an orphan process
- b) a zombie process
- c) a process that executes forever
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. Which of the following system calls transforms executable binary file into a process?

- a) fork
- b) exec
- c) ioctl
- d) longjmp

[View Answer](#)

Answer: b

Explanation: None.

4. How many times the following C program prints yes?

```
main()
{
    fork();fork();printf("yes");
}
```

- a) only once
- b) twice
- c) four times
- d) eight times

[View Answer](#)

Answer: c

Explanation: None.

5. Which of the following calls never returns an error?

- a) getpid
- b) fork
- c) ioctl
- d) open

[View Answer](#)

Answer: a

Explanation: None.

6. A fork system call will fail if _____

- a) the previously executed statement is also a fork call
- b) the limit on the maximum number of processes in the system would be executed
- c) the limit on the minimum number of processes that can be under execution by a single user would be executed

d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. If a thread invokes the exec system call _____

- a) only the exec executes as a separate process
- b) the program specified in the parameter to exec will replace the entire process
- c) the exec is ignored as it is invoked by a thread
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

8. If exec is called immediately after forking _____

- a) the program specified in the parameter to exec will replace the entire process
- b) all the threads will be duplicated
- c) all the threads may be duplicated
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

9. If a process does not call exec after forking _____

- a) the program specified in the parameter to exec will replace the entire process
- b) all the threads should be duplicated
- c) all the threads should not be duplicated
- d) none of the mentioned

[View Answer](#)

Answer: b

1. What is Thread cancellation?

- a) the task of destroying the thread once its work is done
- b) the task of removing a thread once its work is done
- c) the task of terminating a thread before it has completed
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

2. When a web page is loading, and the user presses a button on the browser to stop loading the page?

- a) the thread loading the page continues with the loading
- b) the thread loading the page does not stop but continues with another task
- c) the thread loading the page is paused

d) the thread loading the page is cancelled

[View Answer](#)

Answer: d

Explanation: None.

3. When one thread immediately terminates the target thread, it is called _____

a) Asynchronous cancellation

b) Systematic cancellation

c) Sudden Termination

d) Deferred cancellation

[View Answer](#)

Answer: a

Explanation: None.

4. When the target thread periodically checks if it should terminate and terminates itself in an orderly manner, it is called?

a) Asynchronous cancellation

b) Systematic cancellation

c) Sudden Termination

d) Deferred cancellation

[View Answer](#)

Answer: d

Explanation: None.

5. Cancelling a thread asynchronously _____

a) frees all the resources properly

b) may not free each resource

c) spoils the process execution

d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

6. Cancellation point is the point where _____

a) the thread can be cancelled – safely or otherwise doesn't matter

b) the thread can be cancelled safely

c) the whole process can be cancelled safely

d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

7. If multiple threads are concurrently searching through a database and one thread returns the result then the remaining threads must be _____

a) continued

- b) cancelled
- c) protected
- d) none of the mentioned

[View Answer](#)

Answer: b

1. Signals that occur at the same time, are presented to the process _____

- a) one at a time, in a particular order
- b) one at a time, in no particular order
- c) all at a time
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

2. Which of the following is not TRUE?

- a) Processes may send each other signals
- b) Kernel may send signals internally
- c) A field is updated in the signal table when the signal is sent
- d) Each signal is maintained by a single bit

[View Answer](#)

Answer: c

Explanation: A field is updated in the **process table** when the signal is sent.

3. Signals of a given type _____

- a) are queued
- b) are all sent as one
- c) cannot be queued
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: The signal handler will be invoked only once.

4. The three ways in which a process responds to a signal are _____

- a) ignoring the signal
- b) handling the signal
- c) performing some default action
- d) all of the mentioned

[View Answer](#)

Answer: d

Explanation: None.

5. Signals are identified by _____

- a) signal identifiers
- b) signal handlers
- c) signal actions

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

6. When a process blocks the receipt of certain signals?

a) The signals are delivered

b) The signals are not delivered

c) The signals are received until they are unblocked

d) The signals are received by the process once they are delivered

[View Answer](#)

Answer: a

Explanation: None.

7. The _____ maintains pending and blocked bit vectors in the context of each process.

a) CPU

b) Memory

c) Process

d) Kernel

[View Answer](#)

Answer: d

Explanation: None.

8. In UNIX, the set of masked signals can be set or cleared using the _____ function.

a) sigmask

b) sigmaskproc

c) sigprocmask

d) sigproc

[View Answer](#)

Answer: c

Explanation: None.

9. The usefulness of signals as a general inter process communication mechanism is limited because _____

a) they do not work between processes

b) they are user generated

c) they cannot carry information directly

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

10. The usual effect of abnormal termination of a program is _____

a) core dump file generation

- b) system crash
- c) program switch
- d) signal destruction

[View Answer](#)

Answer: a

Explanation: None.

11. In UNIX, the abort() function sends the _____ signal to the calling process, causing abnormal termination.

- a) SIGTERM
- b) SIGSTOP
- c) SIGABORT
- d) SIGABRT

[View Answer](#)

Answer: d

Explanation: None.

12. In most cases, if a process is sent a signal while it is executing a system call

- a) the system call will continue execution and the signal will be ignored completely
- b) the system call is interrupted by the signal, and the signal handler comes in
- c) the signal has no effect until the system call completes
- d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

13. A process can never be sure that a signal it has sent _____

- a) has which identifier
- b) has not been lost
- c) has been sent
- d) all of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

14. In UNIX, the _____ system call is used to send a signal.

- a) sig
- b) send
- c) kill
- d) sigsend

[View Answer](#)

Answer: c

1. Thread pools are useful when _____

- a) when we need to limit the number of threads running in the application at the

same time

- b) when we need to limit the number of threads running in the application as a whole
- c) when we need to arrange the ordering of threads
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

2. Instead of starting a new thread for every task to execute concurrently, the task can be passed to a _____

- a) process
- b) thread pool
- c) thread queue
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

3. Each connection arriving at multi threaded servers via network is generally _____

- a) is directly put into the blocking queue
- b) is wrapped as a task and passed on to a thread pool
- c) is kept in a normal queue and then sent to the blocking queue from where it is dequeued
- d) none of the mentioned

[View Answer](#)

Answer: b

Explanation: None.

4. What is the idea behind thread pools?

- a) a number of threads are created at process startup and placed in a pool where they sit and wait for work
- b) when a process begins, a pool of threads is chosen from the many existing and each thread is allotted equal amount of work
- c) all threads in a pool distribute the task equally among themselves
- d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. If the thread pool contains no available thread _____

- a) the server runs a new process
- b) the server goes to another thread pool
- c) the server demands for a new pool creation

d) the server waits until one becomes free

[View Answer](#)

Answer: d

Explanation: None.

6. Thread pools help in _____

a) servicing multiple requests using one thread

b) servicing a single request using multiple threads from the pool

c) faster servicing of requests with an existing thread rather than waiting to create a new thread

d) none of the mentioned

[View Answer](#)

Answer: c

Explanation: None.

7. Thread pools limit the number of threads that exist at any one point, hence _____

a) not letting the system resources like CPU time and memory exhaust

b) helping a limited number of processes at a time

c) not serving all requests and ignoring many

d) none of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

8. The number of the threads in the pool can be decided on factors such as _____

a) number of CPUs in the system

b) amount of physical memory

c) expected number of concurrent client requests

d) all of the mentioned

[View Answer](#)

Answer: d

1.

If there are multiple recycle bin for a hard disk

A. ☐ You can set different size for each recycle bin

B. ☐ You can choose which recycle bin to use to store your deleted files

C. ☐ You can make any one of them default recycle bin

D. ☐ None of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

2.

Identify false statement

- A. ☐ You can find deleted files in recycle bin
- B. ☐ You can restore any files in recycle bin if you ever need
- C. ☐ You can increase free space of disk by sending files in recycle bin
- D. ☐ You can right click and choose Empty Recycle Bin to clean it at once

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

3.

If the displayed system time and date is wrong, you can reset it using

- A. ☐ Write
- B. ☐ Calendar
- C. ☐ Write file
- D. ☐ Control panel

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

4.

You should save your computer from?

- A. ☐ Viruses
- B. ☐ Time bombs
- C. ☐ Worms
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

5.

World Wide Web is being standard by

- A. ☐ Worldwide corporation
- B. ☐ W3C
- C. ☐ World Wide Consortium
- D. ☐ World Wide Web Standard

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

6.

A co-processor

- A. ☐ Is relatively easy to support in software
- B. ☐ Causes all processor to function equally
- C. ☐ Works with any application
- D. ☐ Is quite common in modern computer

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

A coprocessor is a computer processor used to supplement the functions of the primary processor (the CPU). Operations performed by the coprocessor may be floating point arithmetic, graphics, signal processing, string processing, cryptography or I/O Interfacing with peripheral devices.

7.

A Microsoft Windows is a(n)

- A. ☐ Operating system
- B. ☐ Graphic program
- C. ☐ Word Processing
- D. ☐ Database program

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

Microsoft Windows is a group of Operating Systems manufactured by Microsoft. Windows is available in 32 and 64-bit versions and offers a graphical user interface (GUI), multitasking functionalities, virtual memory management capabilities, and support for several peripheral devices. Windows Operating Systems constitute client as well as server versions.

8.

Which of the following is program group?

- A. ☐ Accessories
- B. ☐ Paint
- C. ☐ Word
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

9.

Which is not application software?

- A. ☐ Windows NT
- B. ☐ Page Maker
- C. ☐ WinWord XP
- D. ☐ Photoshop

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

Windows NT is a family of operating systems produced by Microsoft.

10.

The program compresses large files into a smaller file

- A. ☐ WinZip
- B. ☐ WinShrink
- C. ☐ WinStyle
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

- A. ☐ Lynx
- B. ☐ MS DOS
- C. ☐ Windows XP
- D. ☐ Process Control

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

A real-time operating system (RTOS) is an operating system (OS) intended to serve real-time applications that process data as it comes in, typically without buffer delays. Processing time requirements (including any OS delay) are measured in tenths of seconds or shorter increments of time.

12.

Which of the following operating system does not implement the multitasking truly?

- A. ☐ Windows 98
- B. ☐ Windows NT
- C. ☐ Windows XP
- D. ☐ MS DOS

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

Multitasking, in an operating system, is allowing a user to perform more than one computer task (such as the operation of an application program) at a time. The operating system is able to keep track of where you are in these tasks and go from one to the other without losing information.

MS DOS does not implement the multitasking.

13.

Which of the following windows version support 64 bit processor?

- A. ☐ Windows 98
- B. ☐ Windows 2000
- C. ☐ Windows XP
- D. ☐ Windows 95

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

Solution:

Microsoft Windows XP Professional x64 Edition, released on April 25, 2005, is an edition of Windows XP for x86-64 personal computers. It is designed to use the expanded 64-bit memory address space provided by the x86-64 architecture.

The primary benefit of moving to 64-bit is the increase in the maximum allocatable random-access memory (RAM).

14.

What program runs first after computer is booted and loading GUI?

- A. ☐ Desktop Manager
- B. ☐ File Manager
- C. ☐ Windows Explorer
- D. ☐ Authentication

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

15.

Which of the following operating system do you choose to implement a client server network?

- A. ☐ MS DOS
- B. ☐ Windows
- C. ☐ Windows 98
- D. ☐ Windows 2000

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

6.

Which of the following Operating systems is better for implementing a Client-Server network

- A. ☐ MS DOS
- B. ☐ Windows 95
- C. ☐ Windows 98
- D. ☐ Windows 2000

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

17.

My Computer was introduced from

- A. ☐ Windows 3.1
- B. ☐ Windows 3.11
- C. ☐ Windows 95
- D. ☐ Windows 98

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

18.

Which of the following Windows do not have Start button

- A. ☐ Windows Vista
- B. ☐ Windows 7
- C. ☐ Windows 8
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

19.

Which is the latest version of MS Windows?

- A. ☐ Windows 2007
- B. ☐ Windows 7
- C. ☐ Windows 11
- D. ☐ Windows 10

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

20.

Which operating system doesn't support networking between computers?

- A. ☐ Windows 3.1
- B. ☐ Windows 95
- C. ☐ Windows 2000
- D. ☐ Windows NT

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

21.

Which of the following does not support more than one program at a time?

- A. ☐ DOS
- B. ☐ Linux
- C. ☐ Windows
- D. ☐ Unix

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

DOS is a family of disk operating systems. DOS primarily consists of MS-DOS and a rebranded. Only one program at a time can use them and DOS itself has no functionality to allow more than one program to execute at a time.

22.

Which of the following is not an operating system?

- A. ☐ DOS
- B. ☐ Linux
- C. ☐ Windows
- D. ☐ Oracle

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

Oracle database (Oracle DB) is a relational database management system (RDBMS) from the Oracle Corporation.

23.

Linux is a(n) operating system

- A. ☐ Open source
- B. ☐ Microsoft
- C. ☐ Windows
- D. ☐ Mac

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

Linux is a family of free and open-source software operating systems built around the Linux kernel. Typically, Linux is packaged in a form known as a Linux distribution for both desktop and server use.

24.

Which operating system can you give smallest file name?

- A. ☐ Ps/2
- B. ☐ Dos
- C. ☐ Windows
- D. ☐ Windows NT

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

DOS (Disk Operating System) is an operating system that runs from a hard disk drive. The term can also refer to a particular family of disk operating systems, most commonly MS-DOS (Microsoft Disk Operating System).

25.

Which one is not operating system?

- A. ☐ P11
- B. ☐ OS/2
- C. ☐ Windows
- D. ☐ Unix

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

26.

Which of the following is not a multitasking operating system?

- A. ☐ Windows

- B. ☐ Linux
- C. ☐ Win NT
- D. ☐ DOS

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

DOS (Disk Operating System) is not a multitasking operating system

27.

You should choose Sleep option when

- A. ☐ The computer is tired after working for the whole day
- B. ☐ You are leaving for a very short time and want to resume you work shortly
- C. ☐ When computer gets hanged frequently. Let it sleep for some time
- D. ☐ You finish working and going to bed

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

Sleep mode, sometimes called standby or suspend mode, is a power-sparing state that a computer can enter when not in use. The computer's state is maintained in RAM (random access memory). A computer usually wakes from sleep mode through touching a key, clicking the mouse or pressing the power button.

28.

The displays the name of every computer user on the computer

- A. ☐ Wish list screen
- B. ☐ Command screen
- C. ☐ Welcome screen
- D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

Solution:

Welcome screen displays the name of every computer user on the computer display screen (Computer Monitor).

29.

The category of software most appropriate for controlling the design and layout of complex document like newsletters and brochure is:

- A. ☐ Word processing
- B. ☐ Computer aided design
- C. ☐ Web page authoring
- D. ☐ Desktop publishing

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

30.

Which one is not a system tool?

- A. ☐ Backup
- B. ☐ Disk defragment
- C. ☐ Virus scanning
- D. ☐ All of the above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

1.

The memory which allocates space for DOS and application is called

- A. ☐ Expanded memory
- B. ☐ Cache memory
- C. ☐ Virtual memory
- D. ☐ Conventional memory

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

In DOS memory management, conventional memory, also called base memory, is the first 640 kilobytes (640×1024 bytes) of the memory on IBM PC or compatible systems. It is the read-write memory directly addressable by the processor for use by the operating system and application programs.

32.

The operating system creates _____ from the physical computer

- A. ☐ Virtual space
- B. ☐ Virtual computers
- C. ☐ Virtual device
- D. ☐ None

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

In computing, a virtual machine is an emulation of a computer system. Virtual machines are based on computer architectures and provide the functionality of a physical computer.

33.

Which menu bar selection would you access to open file?

- A. ☐ Option
- B. ☐ Help
- C. ☐ View
- D. ☐ None of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

34.

Which mode loads minimal set of drivers when starting Windows?

- A. ☐ Safe Mode

- B. ☐ Normal Mode
- C. ☐ VGA Mode
- D. ☐ Network Support Mode

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

Safe mode is a diagnostic mode of a computer operating system (OS). It can also refer to a mode of operation by application software. In Windows, safe mode only allows essential system programs and services to start up at boot. Safe mode is intended to help fix most, if not all problems within an operating system. It is also widely used for removing rogue security software.

35.

Which of the following are loaded in safe mode?

- A. ☐ Keyboard driver
- B. ☐ Mouse driver
- C. ☐ VGA drive
- D. ☐ All of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

36.

A is a named location on a disk where files are stored

- A. ☐ Folder

- B. ☐ Pod
- C. ☐ Version
- D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

When talking about file systems, a folder (also called directory, or catalog) is a way to organize computer files. A folder is a storage space that many files can be placed into to group them together and organize the computer. A folder can also contain other folders.

37.

Which type of command requires additional files to perform specific operations?

- A. ☐ Internal commands
- B. ☐ External commands
- C. ☐ Valuable commands
- D. ☐ Primary commands

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

38.

Which of the following is system software?

- A. ☐ Operating system

- B. ☐ Compiler
- C. ☐ Utilities
- D. ☐ All of the above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

39.

A user-interface that is easy to use is considered to be

- A. ☐ User-happy
- B. ☐ User-simple
- C. ☐ User-friendly
- D. ☐ None of the above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

40.

A is a flash memory storage device that plugins into a USB port

- A. ☐ USB snap drive
- B. ☐ USB flash drive

- C. ☐ USB memory maker drive
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

41.

The is the drive containing the files to be copied

- A. ☐ Source drive
- B. ☐ Destination drive
- C. ☐ USB drive
- D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

42.

Which one of the following is not a multitasking operating system?

- A. ☐ DOS
- B. ☐ Windows
- C. ☐ Unix
- D. ☐ Linux

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

DOS is not a multitasking operating system. DOS did however provide a Terminate and Stay Resident (TSR) function which allowed programs to remain resident in memory.

43.

The most recent version of MAC OS is based on the
operating system

- A. ☐ Windows
- B. ☐ Linux
- C. ☐ Unix
- D. ☐ CMOS

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

44.

In Windows, start button is used to

- A. ☐ Run applications
- B. ☐ Device setting
- C. ☐ Turn off the system
- D. ☐ All of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

The Start button was first introduced with the release of Microsoft Windows 95 and has been featured in all releases of Windows since. The Start button allows users to access their run applications, device setting, turn off the system, computer programs or configure Microsoft Windows easily by accessing the Start Menu.

45.

Which one is true for unconditional disk formatting?

- A. ☐ Destroys every byte of data on a disk by overwriting it with with blank spaces
- B. ☐ Do not check/scan surface after format
- C. ☐ Transfer system files after format
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

6.

Once text has been cut to the clipboard, you can that text into another document

- A. ☐ Paste
- B. ☐ Copy
- C. ☐ Transfer
- D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

47.

What is the function of radio button?

- A. ☐ To select multiple option
- B. ☐ To select single option
- C. ☐ To select all option
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

A radio button or option button is a graphical control element that allows the user to choose only one of a predefined set of mutually exclusive options.

48.

The Banker's algorithm is used

- A. ☐ to rectify deadlock
- B. ☐ to detect deadlock
- C. ☐ to prevent deadlock
- D. ☐ to solve deadlock

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

Solution:

The Banker algorithm, sometimes referred to as the detection algorithm, is a resource allocation and deadlock avoidance algorithm developed by Edsger Dijkstra that tests for safety by simulating the allocation of predetermined maximum possible amounts of all resources, and then makes an "s-state" check to test for possible deadlock conditions for all other pending activities, before deciding whether allocation should be allowed to continue.

Source : [wikipedia.org](https://en.wikipedia.org/wiki/Banker_algorithm)

49.

The primary purpose of an operating system is:

- A. ☐ To make the most efficient use of the computer hardware
- B. ☐ To allow people to use the computer
- C. ☐ To keep systems programmers employed
- D. ☐ To make computers easier to use

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

An operating system (OS) is system software that manages computer hardware and software resources and provides common services for computer programs.

For hardware functions such as input and output and memory allocation, the operating system acts as an intermediary between programs and the computer hardware, although the application code is usually executed directly by the hardware and frequently makes system calls to an OS function or is interrupted by it.

Source : [wikipedia.org](https://en.wikipedia.org/wiki/Operating_system)

50.

You can use print manage window

- A. ☐ To check status of files in the print queue
- B. ☐ To cancel the print job
- C. ☐ To interrupt printing

D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

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C. ☐ Transfer

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[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

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[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

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[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

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[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

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Source : wikipedia.org

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[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

51.

Which of the following operating system reads and reacts in actual time?

- A. ☐ Quick Response System
- B. ☐ Real Time System

- C. ☐ Time Sharing System
- D. ☐ Batch Processing System

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

A real-time operating system (RTOS) is an operating system (OS) intended to serve real-time applications that process data as it comes in, typically without buffer delays. Processing time requirements (including any OS delay) are measured in tenths of seconds or shorter increments of time. A real time system is a time bound system which has well defined fixed time constraints.

52.

All of the following are TRUE regarding virtual memory EXCEPT

- A. ☐ Any amount of RAM can be allocated to virtual memory
- B. ☐ The setting for the amount of hard disk drive space to allocate virtual memory can be manually change
- C. ☐ This temporary storage is called the swap file or page file
- D. ☐ Virtual memory is the physical space o the hard drive

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

53.

The essential difference between an operating system like Linux and one like Windows is that

- A. ☐ Windows can run with an Intel processor, whereas Linux cannot
- B. ☐ Linux is a proprietary whereas Windows is not
- C. ☐ There are multiple versions of Linux, but only one version of Windows
- D. ☐ Any programmer can modify Linux code which is not permitted with Windows

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

54.

What is dispatch latency?

- A. ☐ The time taken by the dispatcher to stop one process and start another
- B. ☐ The time taken by the processor to write a file into disk
- C. ☐ The whole time taken by all processor
- D. ☐ None of Above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

55.

A page fault occurs when

- A. ☐ the Deadlock happens
- B. ☐ the Segmentation starts

- C. ☐ the page is found in the memory
- D. ☐ the page is not found in the memory

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

56.

Whenever you move a directory from one location to another

- A. ☐ All files inside the directory are moved
- B. ☐ All the subdirectory inside that directory are moved
- C. ☐ The directory is moved the source file is not moved
- D. ☐ Both A and B

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

All the files inside the directory and inside subdirectory are moved in that location

57.

The Basic Input Output System (BIOS) resides in

- A. ☐ RAM
- B. ☐ ROM
- C. ☐ The CPU

D. ☐ Memory Cache

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

58.

Which of the following does not occur during the power-on-self-test (POST)?

- A. ☐ The scan disk utility begins to run
- B. ☐ The video card and video memory are tested
- C. ☐ The BIOS identification process occurs
- D. ☐ Memory chip are checked to ensure that they are working properly

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

59.

The maximum size of a write file is limited to only

- A. ☐ Name of the file
- B. ☐ Extension of the file
- C. ☐ The amount of memory in your computer
- D. ☐ All of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

60.

Which of the following is drop down list?

- A. ☐ List
- B. ☐ Combo box
- C. ☐ Text area
- D. ☐ None

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

- A. ☐ Recycle bin
- B. ☐ Desktop
- C. ☐ Taskbar
- D. ☐ My computer

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

In computing, the Trash (also known as the Recycle Bin in Windows and by other names in other operating systems) is temporary storage for files that have been deleted in a file manager by the user, but not yet permanently erased from the file system. Typically, a recycle

bin is presented as a special file directory to the user (whether or not it is actually a single directory depends on the implementation), allowing the user to browse deleted files, undelete those that were deleted by mistake, or delete them permanently (either one by one, or by the "Empty Trash" function).

Source : [wikipedia.org](https://en.wikipedia.org/wiki/Bin_directory)

62.

Which components appear in the initial Windows start up display?

- A. ☐ Dialog boxes
- B. ☐ Start menu
- C. ☐ Taskbar
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

63.

A small part of taskbar that has icons of background running applications is

- A. ☐ Start button
- B. ☐ Quick launch
- C. ☐ Task bar
- D. ☐ System tray

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

64.

An operating system version designed for use with a media center PC is Microsoft Windows XP

- A. ☐ Home edition
- B. ☐ Media center edition
- C. ☐ Tablet PC edition
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

65.

An operating system version designed for use with a tablet PC is Microsoft Windows XP

- A. ☐ Home edition
- B. ☐ Media center edition
- C. ☐ Tablet PC edition
- D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

66.

If you hard disk is partitioned into 3 drives, the number of recycle bin for that hard disk is

- A. ☐ 1
- B. ☐ 2
- C. ☐ 3
- D. ☐ 4

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

67.

The date and time displays on

- A. ☐ Taskbar
- B. ☐ Status bar
- C. ☐ System tray
- D. ☐ Launch pad

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

68.

..... runs on a computer hardware and serves as a platform for other system to run on

- A. ☐ Operating system
- B. ☐ Application system
- C. ☐ System software
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

69.

Which runs on computer hardware and serve as platform for other software to run on?

- A. ☐ Operating System
- B. ☐ Application Software
- C. ☐ System Software
- D. ☐ All

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

70.

Which is the first program run on a computer when the computer boots up?

- A. ☐ System software
- B. ☐ Operating system
- C. ☐ System operations
- D. ☐ None

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

1.

A bar that inform you the available options in your computer, opened applications, background running applications and can be used to switch between applications quickly is

- A. ☐ Menu bar
- B. ☐ Tool bar
- C. ☐ Status bar
- D. ☐ Task bar

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

12.

Which components appear in the initial windows start up display?

- A. ☐ Dialog box
- B. ☐ Task bar
- C. ☐ Start menu
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

A taskbar is an element of a graphical user interface which has various purposes. It typically shows which programs are currently running.

13.

Taskbar is used for

- A. ☐ Navigation program
- B. ☐ Switching between program
- C. ☐ Start a program
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

Answer: Taskbar is used to launch an application through the start menu. It displays all the opened applications and files. It is used to set taskbar and desktop properties.

14.

To install the new font in window XP

- A. ☐ Start -> setting -> control panel -> font
- B. ☐ Start -> setting -> control panel -> font -> install new font
- C. ☐ Start -> control panel -> font -> install new font
- D. ☐ Start -> setting -> font

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

15.

When a peripheral device needs immediate attention from the operating system, it generates a(n)

- A. ☐ Interrupt
- B. ☐ Spool
- C. ☐ Stack
- D. ☐ Page file

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

16.

Underlined text, such as text and folder names is referred to as

- A. ☐ Hyperlink
- B. ☐ Menu
- C. ☐ Source drive
- D. ☐ None of these

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

17.

Which of the following is suitable after you install new drivers?

- A. ☐ Shut Down
- B. ☐ Restart
- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

18.

Windows displays various options to shutdown. Which is suitable at the end of day?

- A. ☐ Shut Down

- B. ☐ Restart
- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

19.

Which of the following shutdown method is often called Warm Boot?

- A. ☐ Shut Down
- B. ☐ Restart
- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

20.

_____ is most often done after fixing a problem, adding a new program or making configuration change

- A. ☐ Shut Down
- B. ☐ Restart

- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

21.

___ is a compromise mode between Shut Down and Sleep mode because it does not consume power and remembers the current state of your desktop

- A. ☐ Shut Down
- B. ☐ Restart
- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

This option was designed for laptops and might not be available for all PCs. (For example, PCs with InstantGo don't have the hibernate option.) Hibernate uses less power than sleep and when you start up the PC again, you're back to where you left off (though not as fast as sleep).

Use hibernation when you know that you won't use your laptop or tablet for an extended period and won't have an opportunity to charge the battery during that time. First check to see if this option is available on your PC and if it is, turn it on.

Source : microsoft.com

22.

You should choose this mode if you don't know how long you won't use your computer but want to have the same desktop state when you resume

- A. ☐ Shut Down
- B. ☐ Restart
- C. ☐ Sleep
- D. ☐ Hibernate

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

This option was designed for laptops and might not be available for all PCs. (For example, PCs with InstantGo don't have the hibernate option.) Hibernate uses less power than sleep and when you start up the PC again, you're back to where you left off (though not as fast as sleep).

Use hibernation when you know that you won't use your laptop or tablet for an extended period and won't have an opportunity to charge the battery during that time. First check to see if this option is available on your PC and if it is, turn it on.

Source : microsoft.com

23.

The category of operating system that you most likely have running on your PDA computer is a Operating system

- A. ☐ Real time
- B. ☐ Single user, single task
- C. ☐ Single user, multitask
- D. ☐ Multiuser, multitask

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

24.

Running multiple programs at the same time is called:

- A. ☐ Multitasking
- B. ☐ Foreground tasking
- C. ☐ Single tasking
- D. ☐ Symmetric

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

Multitasking, in an operating system, is allowing a user to perform more than one computer task (such as the operation of an application program) at a time. The operating system is able to keep track of where you are in these tasks and go from one to the other without losing information.

25.

What is the meaning of "Hibernate" in Windows XP/Windows 7?

- A. ☐ Restart the Computer in safe mode
- B. ☐ Restart the Computer in hibernate mode
- C. ☐ Shutdown the Computer terminating all the running applications
- D. ☐ Shutdown the Computer without closing the running applications

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

26.

The function of Dir/W is

- A. ☐ Show all details of file
- B. ☐ Show only file name and directory name
- C. ☐ Shows only directory
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

27.

Page stealing

- A. ☐ Is a sign of an efficient system
- B. ☐ Is taking page frame from other working sets
- C. ☐ Should be the turning goal
- D. ☐ Is taking layer disk space for page in page out

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

28.

What do you mean by dialog box?

- A. ☐ Interactive message box
- B. ☐ Group of options
- C. ☐ Set of controls
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

29.

Dial up connection allows you to

- A. ☐ Connect ISP
- B. ☐ Internet
- C. ☐ Server
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

A dial-up connection is established when two or more communication devices use a public switched telephone network (PSTN) to connect to an Internet service provider (ISP).

30.

To properly exit Windows

- A. ☐ Click the stop button on the desktop
- B. ☐ Click the exit button on the desktop
- C. ☐ Select shut down from Start menu
- D. ☐ None of above

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

31.

Which is not a system tool?

- A. ☐ Folder
- B. ☐ Backup
- C. ☐ Scandisk
- D. ☐ Format

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

32.

A utility that can be used to minimize the number of fragmented files and enhance the speed

- A. ☐ Disk space

- B. ☐ Defrag
- C. ☐ Scandisk
- D. ☐ Double space

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

33.

To change the volume label

- A. ☐ Vol
- B. ☐ Label
- C. ☐ Scandisk
- D. ☐ None

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

34.

Which of the following is a disk compression tools?

- A. ☐ Drive space
- B. ☐ Defragmenter
- C. ☐ Scandisk

D. ☐ None of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

35.

To save your computer from viruses you will do

- A. ☐ Install antivirus software and run it
- B. ☐ Make physical safe for the removal disk
- C. ☐ Scan the removable disk before using it
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

36.

How can you optimize performance of your computer?

- A. ☐ Delete unused files
- B. ☐ Defrag disk
- C. ☐ Scan for virus
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

37.

Scandisk

- A. ☐ Checks the disk
- B. ☐ Give information about disk
- C. ☐ Run from DOS mode
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

38.

Recently used application file list appears in the Windows operating system

- A. ☐ Setting menu
- B. ☐ Documents menu
- C. ☐ Run dialog box
- D. ☐ Programs menu

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

39.

..... are specially designed computer chips that reside inside other devices, such as your car or electric thermostat

- A. ☐ Server
- B. ☐ Embedded computer
- C. ☐ Robotic computer
- D. ☐ Mainframes

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

40.

The title bar always displays on

- A. ☐ Top of the open windows
- B. ☐ Left side of the open window
- C. ☐ Right side of the open window
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

41.

Which of the following is used to display the content of a certain drive or folder?

- A. ☐ Click the drive or folder while holding down the Alt key
- B. ☐ Triple click the drive or folder
- C. ☐ Right click the drive or folder
- D. ☐ Double click the drive or folder

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

42.

Which of the following file menu option saves document to disk?

- A. ☐ Save
- B. ☐ Create
- C. ☐ Rename
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

43.

Booting means

- A. ☐ Restarting computer
- B. ☐ Installing program
- C. ☐ Removing errors
- D. ☐ Switch off

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

To boot a computer is to load an operating system into the computer's main memory or random access memory (RAM). Once the operating system is loaded, it's ready for users to run applications.

44.

When you rename a file five times then the number of file in the disk is

- A. ☐ 1
- B. ☐ 2
- C. ☐ 3
- D. ☐ 5

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

No explanation is given for this question [Let's Discuss on Board](#)

45.

When you open my computer on desktop you see the information of

- A. ☐ Hard disk
- B. ☐ CD
- C. ☐ Removable disk
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

46.

..... is an intermediate storage for deleted files

- A. ☐ My computer
- B. ☐ My documents
- C. ☐ Recycle bin
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

Solution:

In computing, the Trash (also known as the Recycle Bin in Windows and by other names in other operating systems) is temporary storage for files that have been deleted in a file manager by the user, but not yet permanently erased from the file system. Typically, a recycle bin is presented as a special file directory to the user, allowing the user to browse deleted files, undelete those that were deleted by mistake, or delete them permanently (either one by one, or by the "Empty Trash" function).

47.

We can start the application from?

- A. ☐ Log off
- B. ☐ Network place
- C. ☐ Recycle bin
- D. ☐ Run

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Solution:

On the Microsoft Windows operating system, the Run command is used to directly open an application or document whose path is known. It functions more or less like a single-line command line interface

48.

Which of the following is not process states?

- A. ☐ New
- B. ☐ Running
- C. ☐ Ready
- D. ☐ Finished

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

49.

In DOS, the maximum length of filename is

- A. ☐ 5
- B. ☐ 8
- C. ☐ 11
- D. ☐ 10

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

The older MS-DOS FAT file system supports a maximum of 8 characters for the base file name and 3 characters for the extension, for a total of 12 characters including the dot separator. This is commonly known as an 8.3 file name.

50.

The question mark (?) indicates in file searching

- A. ☐ A single character
- B. ☐ A group of character
- C. ☐ Questions
- D. ☐ None of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

51.

Save operation means

- A. ☐ Put data into processor
- B. ☐ Put data into internal memory
- C. ☐ Put data into secondary storage
- D. ☐ Put data into monitor

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

52.

CAD software is most likely to be used by

- A. ☐ Web designer
- B. ☐ Engineers
- C. ☐ Project Manager
- D. ☐ Magazine Editor

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

Computer-aided design (CAD) is the use of computer systems to aid in the creation, modification, analysis, or optimization of a design. CAD software is used to increase the productivity of the designer, improve the quality of design, improve communications through documentation, and to create a database for manufacturing.

53.

A spooler is a

- A. ☐ Location in memory that maintains the contents of documents until it prints out
- B. ☐ Queue of print job that are waiting to print
- C. ☐ Program that coordinates the print job that are waiting to process
- D. ☐ Message sent from the printer to the operating system when a print job is completed

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option C

Solution:

A program that controls spooling -- putting jobs on a queue and taking them off one at a time. Most operating systems come with one or more spoolers, such as a print spooler for spooling documents. In addition, some applications include spoolers. Many word processors, for example, include their own print spooler.

A good print spooler should allow you to change the order of documents in the queue and to cancel specific print jobs.

Source : webopedia.com

54.

The problem with file is that they slow your computer's operation

- A. ☐ Fragmented
- B. ☐ Formatted
- C. ☐ Program
- D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

In computer storage, fragmentation is a phenomenon in which storage space is used inefficiently, reducing capacity or performance and often both. The exact consequences of fragmentation depend on the specific system of storage allocation in use and the particular form of fragmentation.

55.

User action such as keystroke or mouse click are referred to as

- A. ☐ Interrupt
- B. ☐ Tasks
- C. ☐ Processes
- D. ☐ Event

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

56.

Which is not external command?

- A. ☐ Doskey
- B. ☐ Verify
- C. ☐ Print
- D. ☐ Find

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

57.

What is the method of handling deadlocks?

- A. ☐ Use a protocol to ensure that the system will never enter a deadlock state
- B. ☐ Allow the system to enter the deadlock state and then recover
- C. ☐ Pretend that deadlocks never occur in the system
- D. ☐ All of the Above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

58.

To delete a file without allowing it to store in recycle bin

- A. ☐ Press Delete key
- B. ☐ Press Shift + Delete key
- C. ☐ Press Ctrl + Delete key
- D. ☐ Press Alt + Delete key

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

59.

Operating system is a

- A. ☐ System software
- B. ☐ Application software
- C. ☐ Presentation software
- D. ☐ Database software

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option A

Solution:

An operating system (OS) is system software that manages computer hardware and software resources and provides common services for computer programs.

60.

To display a shortcut menu for an object you use

- A. ☐ Click the object
- B. ☐ Right click the object
- C. ☐ Point the object and press Ctrl+P
- D. ☐ Touch the object on the screen with your finger

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option B

61.

Which of the following separates primary file and extension is

- A. ☐ Dot

- B. ☐ Period
- C. ☐ Point
- D. ☐ All of the above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

62.

In Microsoft windows, the graphical pattern on the desktop used as background for windows is

- A. ☐ Icons
- B. ☐ Wall paper
- C. ☐ Picture
- D. ☐ Background

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

Solution:

More commonly referred to as a desktop background in Windows, a wallpaper is an image that is used as a backdrop on any graphical user interface that has a desktop. More plainly, it is the picture or pattern you see on the main screen after your computer has booted up.

63.

All of the following are task performed by the operating system except

- A. ☐ Managing hardware on the computer

- B. ☐ Controlling the access that application program has to the CPU
- C. ☐ Performing housekeeping task like file compression and disk defragmentation
- D. ☐ Provides an interface for user to interact with computer

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

64.

Which of the following is not an operating system?

- A. ☐ CP / M
- B. ☐ Unix
- C. ☐ Pascal
- D. ☐ MS DOS

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option C

No explanation is given for this question [Let's Discuss on Board](#)

65.

Operating system is like a

- A. ☐ Government
- B. ☐ Police
- C. ☐ Parliament

D. ☐ All of above

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option A

6.

Underlined character on the menu or dialog box known as

A. ☐ Hot spot

B. ☐ Hot key

C. ☐ Pane

D. ☐ Underline word

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option B

No explanation is given for this question [Let's Discuss on Board](#)

67.

Which key deletes text before, or to the left, of the insertion point?

A. ☐ PageUp

B. ☐ Delete

C. ☐ PageDown

D. ☐ BackSpace

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

68.

The chunks of a memory are known as

- A. ☐ Sector
- B. ☐ Offset
- C. ☐ Page
- D. ☐ Frame

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

69.

Start / restart the computer is called

- A. ☐ Exit
- B. ☐ Run
- C. ☐ Option
- D. ☐ Boot

[Answer & Solution](#)[Discuss in Board](#)[Save for Later](#)

Answer & Solution

Answer: Option D

No explanation is given for this question [Let's Discuss on Board](#)

70.

Which file is transferred when computer is start up?

- A. ☐ Document
- B. ☐ Program files
- C. ☐ Operating system
- D. ☐ System files

[Answer & Solution](#)

[Discuss in Board](#)

[Save for Later](#)

Answer & Solution

Answer: Option D

Operating systems

- (A) enables the programmer to draw a flow chart
- (B) provides a layer, user friendly interface
- (C) links a program with subroutine it references
- (D) all of these

[View Answer](#)

Ans: B

provides a layer, user friendly interface

Question: 2

Which of the following Is not a part of the operating system?

- (A) Input/output control program

- (B) Job control program
- (C) Supervisor
- (D) Performance monitor

[View Answer](#)

Ans: D

Performance monitor

Question: 3

Operating system is a collection of

- (A) Software routines
- (B) Input-output devices
- (C) Hardware components
- (D) All of these

[View Answer](#)

Ans: A

Software routines

Question: 4

Which of the following is not an operating system?

- (A) UNIX
- (B) MS-DOS
- (C) CP/M
- (D) PASCAL

[View Answer](#)

Ans: D

PASCAL

Question: 5

FIFO scheduling is

- (A) Fair-share scheduling
- (B) Deadline scheduling
- (C) Non-preemptive scheduling
- (D) Preemptive scheduling

[View Answer](#)

Ans: C

Two operating modes of AT are

- (A) Direct mode, indirect mode
- (B) Virtual mode, dedicated mode
- (C) Private mode, public mode
- (D) Real mode, protected mode

[View Answer](#)

Ans: D

Real mode, protected mode

Question: 7

Computer system is divided into how many numbers of components?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

[View Answer](#)

Ans: D

Question: 8

What is the name of the operating system that reads and reacts in terms of actual time?

- (A) Real time system
- (B) Time sharing system
- (C) Quick response system
- (D) Batch system

[View Answer](#)

Ans: A

Real time system

Question: 9

Which of the following software is used to simplify using of system software?

- (A) Time sharing
- (B) Multi-tasking
- (C) Operating environment
- (D) Spreadsheet

[View Answer](#)

Ans: A

Time sharing

Question: 10

UNIX operating system

- (A) can run on PC's and larger system
- (B) is multitasking
- (C) is multiuser

(D) all of these

[View Answer](#)

Ans: D

Card reader is an example of

(A) Multi-tasking

(B) Multiprogramming

(C) Batch operating system

(D) None of these

[View Answer](#)

Ans: C

Batch operating system

Question: 12

Context switching is part of

(A) Interrupt servicing

(B) Interrupt handling

(C) Polling

(D) Spooling

[View Answer](#)

Ans: B

Interrupt handling

Question: 13

Which of the following is an example of a spooled device?

(A) A graphic display device

(B) A line printer used to print the output of a number of jobs

(C) A secondary storage device in a virtual memory system

(D) A terminal used to enter input data to a running program

[View Answer](#)

Ans: B

A line printer used to print the output of a number of jobs

Question: 14

Operating system is resident in memory of which part?

(A) Middle

(B) Lower

(C) Upper

(D) All of these

[View Answer](#)

Ans: C

Upper

Question: 15

Two basic types of operating systems are

(A) Batch and interactive

(B) Sequential and real time

(C) Batch and time share

(D) Sequential and direct

[View Answer](#)

Ans: A

The Operating System was first introduced, the primary goal was mainly to ____

(A) Share memory

(B) User friendly

(C) Optimize resources

(D) None of the given

[View Answer](#)

Ans: C

Optimize resources

Question: 2

The Operating System should work in a network as well as ___ environment.

(A) diverted

(B) data

(C) distributed

(D) direct

[View Answer](#)

Ans: C

distributed

Question: 3

_____ may be the first elementary Operating System.

(A) Resident System

(B) Resident Monitor

(C) Resident Operator

(D) Resident Computer

[View Answer](#)

Ans: B

Resident Monitor

Question: 4

_____ is an example of single user Operating System.

- (A) Ms-Dos
- (B) Linux
- (C) Unix
- (D) Basic

[View Answer](#)

Ans: A

Ms-Dos

Question: 5

The ____ program is not allowed to read data from the disk.

- (A) OS
- (B) Application
- (C) System
- (D) Resident Monitor

[View Answer](#)

Ans: B

_____ mechanism was created, which allowed transferring data to and from memory without the intervention of the CPU.

- (A) Driver Monitor Access
- (B) Driver Memory Access
- (C) Direct Monitor Access
- (D) Direct Memory Access

[View Answer](#)

Ans: D

Direct Memory Access

Question: 7

_____ is a way of dealing with dedicated I/O devices in a multiprogramming system.

- (A) System call
- (B) Spooling
- (C) Storage
- (D) Buffer

[View Answer](#)

Ans: B

Spooling

Question: 8

The allocation of processors by process management is also known as the CPU ____

- (A) Managing
- (B) Processing
- (C) Planning
- (D) Scheduling

[View Answer](#)

Ans: D

Scheduling

Question: 9

When a computer is ____ of any software it is just like dead body.

- (A) Amicable

- (B) Devoid
- (C) A machine
- (D) Some

[View Answer](#)

Ans: B

Operating System assumes responsibility, that of serving as a ____

- (A) Control program
- (B) Contribute program
- (C) Supplement program
- (D) Supply program

[View Answer](#)

Ans: A

Control program

Question: 12

To avoid the delay due to manual operation ____ was introduced.

- (A) Assistant
- (B) Efficient
- (C) Job sequencing
- (D) Manual

[View Answer](#)

Ans: C

Job sequencing

Question: 13

A set of extended instructions providing an interface between the Operating System and the user programs, is called a ____

- (A) Machine call
- (B) System call
- (C) Instruction call
- (D) Service call

[View Answer](#)

Ans: B

System call

Question: 14

System level security is offered by the ____ in a multi-user environment.

- (A) code
- (B) password
- (C) name
- (D) secret code

[View Answer](#)

Ans: B

password

Question: 15

A ____ controls the execution of user programs to prevent errors and improper use of the computer.

- (A) control program
- (B) contribute program

(C) supplement program

(D) supply program

[View Answer](#)

Ans: A

____ give iterative usage of the particular application.

(A) Interface

(B) Icons

(C) Files

(D) Programs

[View Answer](#)

Ans: B

Icons

Question: 2

The ____ attacks and discourage people to get connected to the net.

(A) source program

(B) system

(C) virus

(D) both a and b

[View Answer](#)

Ans: C

virus

Question: 3

____ code will not be entertained for input/output at any circumstance.

- (A) User
- (B) Machine
- (C) I/O
- (D) System

[View Answer](#)

Ans: B

Machine

Question: 4

The multi-user Operating System is based on the concept of ____

- (A) Time-losing
- (B) Time-spooling
- (C) Time-gaining
- (D) Time-sharing

[View Answer](#)

Ans: D

Time-sharing

Question: 5

____ systems have more than one CPU in close communication with the others.

- (A) Communication
- (B) Multiprocessor
- (C) Controller
- (D) Processor

[View Answer](#)

Ans: B

_____ software helps the user to do his/her work.

- (A) Computer
- (B) Utility
- (C) System
- (D) Application

[View Answer](#)

Ans: D

Application

Question: 7

_____ software looks after the functions of the computer.

- (A) Computer
- (B) Utility
- (C) System
- (D) Application

[View Answer](#)

Ans: C

System

Question: 8

The operating system provides special routines called _____ to support the specific behavior of individual device.

- (A) Managers
- (B) Programs
- (C) Application

(D) Device drivers

[View Answer](#)

Ans: D

Device drivers

Question: 9

_____ is one program running at all times on the computer.

(A) Application

(B) Operation

(C) Utility

(D) Operating system

[View Answer](#)

Ans: D

Operating system

Question: 10

Safeguarding of data is called _____

(A) Data Safety

(B) Data Surety

(C) Data Security

(D) Data privacy

[View Answer](#)

Ans: C

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

a. Windows

b. Linux

- c. Oracle
- d. DOS

Hide Answer Workspace

Answer: (c) Oracle

Explanation: Oracle is an RDBMS (Relational Database Management System). It is known as Oracle Database, Oracle DB, or Oracle Only. The first database for enterprise grid computing is the Oracle database.

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

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

Hide Answer Workspace

Answer: (c) 8

Explanation: The maximum length of the filename is 8 characters in the DOS operating system. It is commonly known as an 8.3 filename.

3) When was the first operating system developed?

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

Show Answer Workspace

4) When were MS windows operating systems proposed?

- a. 1994

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

Hide Answer Workspace

Answer: (d) 1985

Explanation: The first MS Windows operating system was introduced in early 1985.

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

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

Hide Answer Workspace

Answer: (a) .txt

Explanation: The .txt file extension is a standard text document extension that contains the unformatted text. It is the default file extension for the notepad.

6) What else is a command interpreter called?

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

Hide Answer Workspace

Answer: (c) shell

Explanation: The command interpreter is also called the shell.

7) What is the full name of FAT?

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

Hide Answer Workspace

Answer: (b) File allocation table.

Explanation: The FAT stands for File allocation table. The FAT is a file system architecture. It is used in computer systems and memory cards. A FAT of the contents of a computer disk indicates which field is used for which file.

8) BIOS is used?

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

Hide Answer Workspace

Answer: (a) By operating system

Explanation: BIOS is used by the operating system. It is used to configure and identify the hardware in a system such as the hard drive, floppy drive, optical drive, CPU, and memory.

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

Hide Answer Workspace

Answer: (a) Restarting computer

Explanation: Booting is a process of the restart the computer. After restarting it, there is no software in the computer's main memory.

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.

Hide Answer Workspace

Answer: (c) The page does not present in memory.

Explanation: Page faults occur when a process tries to access a block page of the memory and that page is not stored in RAM (Read only memory) or memory.

11) Banker's algorithm is used?

- a. To prevent deadlock
- b. To deadlock recovery
- c. To solve the deadlock
- d. None of these

Hide Answer Workspace

Answer: (a) To prevent deadlock

Explanation: Banker's algorithm is used to prevent the deadlock condition. The banker algorithm is sometimes called the detection algorithm. It is named the banker algorithm because it is used to determine whether a loan can be granted in the banking system or not.

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

Hide Answer Workspace

Answer: (a) Recycle bin

Explanation: When you delete a file on your computer device, it is transferred to your computer system's recycle bin or trash.

13) Which is the Linux operating system?

- a. Private operating system
- b. Windows operating system
- c. Open-source operating system
- d. None of these

Hide Answer Workspace

Answer: (c) Open-source operating system

Explanation: The Linux operating system is an open-source operating system made up of a kernel. It is a very safe operating system.

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

Hide Answer Workspace

Answer: (d) Distributed shared memory

Explanation: The DSM stands for Distributed Shared 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

Hide Answer Workspace

Answer: (a) Interface definition language

Explanation: The IDL stands for Interface Definition Language. It is used to establish communications between clients and servers in RPC (Remote Procedure Call).

16) What is bootstrapping called?

- a. Cold boot
- b. Cold hot boot
- c. Cold hot strap
- d. Hot boot

Hide Answer Workspace

Answer: (a) Cold boot

Explanation: Bootstrapping is also known as the cool 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

Hide Answer Workspace

Answer: (c) To memory protection

Explanation: The fence register is used for memory protection on the computer. It is a way to access the memory in the computer.

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

- a. Decreases
- b. Increases
- c. Remains constant
- d. None of these

Hide Answer Workspace

Answer: (b) Increases

Explanation: None

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

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

Hide Answer Workspace

Answer: (c) Ms-Dos

Explanation: The single-user operating system is the operating system in which only one user can access the computer system at a time, and Ms-DOS is the best example of a single-user operating system.

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

- a. CPU
- b. RAM

- c. Address bus
- d. Data bus

Hide Answer Workspace

Answer: (c) Address bus

Explanation: The size of virtual memory is based on the address 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

Hide Answer Workspace

Answer: (a) Translation Lookaside Buffer miss

Explanation: A Translation Lookaside Buffer miss arises when the page table entry needed to translate a virtual address to a physical address is not available in the translation lookaside buffer.

22) Which of the following is not application software?

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

Hide Answer Workspace

Answer: (a) Windows 7

Explanation: Windows 7 is not an application software because it is a operating system.

23) Which of the following supports Windows 64 bit?

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

Hide Answer Workspace

Answer: (a) Window XP

Explanation: Windows XP supports the 64-bits. Windows XP is designed to expand the memory address space. Its original name is Microsoft Windows XP Professional x64 and it is based on the x86-64 architecture.

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

Hide Answer Workspace

Answer: (b) Windows 8

Explanation: Windows 8 does not have a start button because it uses the tablet mode, but windows 8.1 has a start button.

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

Hide Answer Workspace

Answer: (d) DOS

Explanation: DOS stands for Disk operating system. Disk operating system is a single-user operating system that does not support more than one program at a time.

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

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

Hide Answer Workspace

Answer: (e) All of these

Explanation: None

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

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

Hide Answer Workspace

Answer: (b) System call

Explanation: The system call provides an interface for user programs to access the services of the operating system through the API (Application Program Interface).

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

Hide Answer Workspace

Answer: (b) Ready queue

Explanation: The ready queue is a set of all the processes that processes are ready to execute and wait.

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

- a. Fork
- b. Read
- c. Down
- d. All of these

Hide Answer Workspace

Answer: (d) All of these

Explanation: None

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

- a. Timer interrupt
- b. Device
- c. Power failure
- d. Scheduler process

Hide Answer Workspace

Answer: (b) Scheduler process

Explanation: Scheduler process does not interrupt in any running process. Its job is to select the processes for long-term, short-term, and short-term scheduler.

31) What is Microsoft window?

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

Hide Answer Workspace

Answer: (a) Operating system

Explanation: Microsoft Windows is an operating system that was developed by Microsoft company. The Microsoft Windows is available in 32-bits and 64-bits in the market.

32) Which of the following is group of programs?

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

Hide Answer Workspace

Answer: (a) Accessories

Explanation: The windows accessories are a group of programs in the operating system. Windows XP offers many accessories or software that you can use to help with your work. The accessories are not full features programs, but it is useful for a specific task in the operating systems. It provides many programs such as a painting program, a calculator, a word processor, a notepad, and Internet software.

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

Hide Answer Workspace

Answer: (d) Process Control

Explanation: Process control is a best example of a Real time operating system.

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

Hide Answer Workspace

Answer: (d) Windows 2000

Explanation: Windows 2002 operating systems were used to implement a client Server Network. It is a server OS that was developed by Microsoft in April 24, 2002. It includes some features of Windows XP.

35) Which windows was introduced to My Computer?

- a. Windows 10
- b. Windows XP
- c. Windows 95
- d. Windows 98

Hide Answer Workspace

Answer: (c) Windows 95

Explanation: Windows 95 was first window to introduced the My Computer.

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

Hide Answer Workspace

Answer: (b) External commands

Explanation: External commands are required to perform various tasks in DOS.

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

Hide Answer Workspace

Answer: (a) Up to 8 characters

Explanation: MS-DOS operating system uses the file system that supports the 8.3 characters. The eight characters are used to the filename, and three characters are used to the extension.

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

Hide Answer Workspace

Answer: (c) Undelete *.doc

Explanation: Undelete *.doc command is used to fetch a group (.doc) of files that have just been deleted.

39) Which of the following is system software?

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

Hide Answer Workspace

Answer: (d) All of the above

Explanation: The system software is a type of computer program designed to run hardware and software programs on a computer.

According to some definitions, system software also includes system utilities, system restore, development tools, compilers, and debuggers.

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

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

Hide Answer Workspace

Answer: (d) Authentication

1) 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

Hide Answer Workspace

Answer: (b) It is used to store folders and files hierarchically.

Explanation: In the OS, a directory structure is a container that is used to store folders and files in a hierarchical manner.

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

Hide Answer Workspace

Answer: (c) Preemptive scheduling

Explanation: Round-robin scheduling is a preemptive scheduling algorithm in which a specific time is provided to execute each process. This specific time is called time-slice.

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

- a. Bounded Waiting
- b. Progress
- c. Mutual Exclusion
- d. All of these.

Hide Answer Workspace

Answer: (d) All of the these

Explanation: A critical-section is a code segment that can be accessed by a signal mechanism at a given point of time. The segment consists of shared data services that

are need to be used by other systems. The critical section problem must satisfy the three conditions: Mutual Exclusion, Bounded Waiting, and Progress.

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.
- c. Windows is a GUI operating system.
- d. None of the these

Hide Answer Workspace

Answer: (c) Windows is a GUI operating system.

Explanation: Windows is a GUI operating system. Windows OS does not require a command to run. Only one mouse is required to run the windows operating system.

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

- a. NTFS
- b. FAT32
- c. exFAT
- d. All of the these

Hide Answer Workspace

Answer: (d) All of the these

Explanation: The following are the types of file systems that support the Windows operating system, such as NTFS, FAT, exFAT, HFS Plus, and EXT.

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

- a. FN + TAB
- b. ALT + TAB

- c. CTRL + TAB
- d. SHIFT + TAB

Hide Answer Workspace

Answer: (b) ALT + TAB

Explanation: The user uses the Alt + Tab button to switch from one window to another in the Windows operating system. Also, the user can use the Ctrl + Tab button to switch from tab to tab in internet explorer.

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

- a. BAT
- b. EXE
- c. EXE/S
- d. ADD/REMOVE program

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Answer: (b) RDISK.EXE

Explanation: There are the following steps to repair disk in windows NT 4.0:

Step 1: Go to the search button in windows NT 4.0, then type Command Prompt.

Step 2: Then type "RDISK.EXE" and press enter.

Step 3: Then open a pop-up window. This pop-up window will update the emergency repair disk.

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

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

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Answer: (d) SRTF Scheduling

Explanation: Shortest Remaining Time First (SRTF) scheduling is preemptive scheduling. In this scheduling, the process that has the shortest processing time left is executed first.

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

Show Answer Workspace

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

- a. Batch OS
- b. Distributed OS
- c. Real-time OS
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Answer: (d) Network OS

Explanation: The network operating system runs on a server. This operating system has some functions that work to connect local area networks and computers.

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

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Answer: (b) Virtual memory

Explanation: A swap file is a type of file that stores the data retrieved from Read-Only-Memory (RAM) or main memory. It is also a virtual memory because it is not stored in physical 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

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Explanation: Counting semaphore takes only the non-negative integer value that is used to solve the critical section problem and process synchronization.

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

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Answer: (d) C: \ Documents and settings

Explanation: When a user logs in with an account for the first time, Windows 2000 automatically creates a user's profile in the "Documents and Settings" folder.

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

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Answer: (b) Windows

Explanation: Windows is a GUI operating system. This operating system does not require a command to run. Only one mouse is required to run this operating system.

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

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

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Answer: (c) Indexed

Explanation: The indexed allocation method is the best file allocation method because it removes the problem of contiguous and linked allocation.

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

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Answer: (a) User and Computer

Explanation: The OS is software that acts as an interface between a device and users and is also known as system software.

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

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Explanation: In the operating system, paging is a memory management scheme (MMS) in which memory is divided into pages of fixed size.

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

- a. Window desktop
- b. Network connection program
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Explanation: When the computer is powered on, the first operating system program is loaded into the computer. The OS's job is to control the computer's hardware and help other computer programs work.

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

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Explanation: Incremental backups take less time and space than differential and complete backups.

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

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Answer: (d) Stack directory structure

Explanation: Acyclic-graph, Single-level, and Tree directory structures are a type of directory structure in the operating system. But the stack is a linear data structure, so option (d) is correct answer.

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.

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Answer: (a) SJF scheduling

Explanation: Shortest job first scheduling is non-preemptive scheduling. In this scheduling algorithm, the process which takes the least time to complete executes that process first.

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

- a. FCFS
- b. LIFO
- c. SJF
- d. All of the these

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Explanation: Shortest job first scheduling is non-preemptive scheduling. In this scheduling algorithm, the process which takes the least time to complete executes that process first.

23) Consider the following three processes in the FCFS.

Process ID.	Brust-time.	Arrival-time
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What is the average waiting time?

- a. 2
- b. 3
- c. 4
- d. 5

Hide Answer Workspace

Answer: (b) 3

Explanation:

TA Time = CT - AT

Waiting Time = TA - BT

Process ID. Burst-time.	Arrival-time	Completion-Time (CT)	Turnaround-Time (TA)	Waiting Time (WT)
P1	3	3	3	3
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Average waiting time = $(0 + 2 + 7) / 3 = 3$

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

- a. Two
- b. Six
- c. Seven
- d. Five

Hide Answer Workspace

Answer: (a) Two

Explanation: There are two types of buffer-overflows: heap-based and stack-based.

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

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Answer: (a) Contiguous

Explanation: In the contiguous allocation method, the user has to give the size of the file before creating the file so that the operating system can give contiguous blocks in the disk-based on the size of that file.

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

- a. Dynamic Programming algorithm
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- c. Banker's algorithm
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Explanation: Banker's algorithm is a deadlock avoidance and resource allocation algorithm. This algorithm was developed by Edger Dijkstra. It is also called a detection 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

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Explanation: The operating system information is not the component of the PCB, so option (d) is the correct answer.

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.

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Answer: (a) Swapping

Explanation: Swapping is a technique in which the process is removed from the main memory and stored in secondary memory. It is used to improve the main memory utilization.

29) Buffer is a _____.

- a. Permanent area
- b. Temporary area
- c. Small area
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Explanation: Buffer is a temporary area where data is stored for some time before being transferred to the main memory.

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

- a. Batch OS
- b. Distributed OS
- c. Real-time OS
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Answer: (c) Real-time OS

Explanation: The real-time OS supports real-time applications. This OS is used for industrial and scientific work. It completes the tasks in a given time.

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

Hide Answer Workspace

Answer: (c) ELF Binary Format

Explanation: ELF stands for "Executable-and-Linkable-Format". The ELF format is used for libraries and executable files in Linux operating systems.

32) What is Kali Linux?

- a. Network device
- b. Operating system
- c. Server name
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Explanation: Kali Linux is an operating system similar to Windows, Unix, and macOS. Kali operating system was designed for reverse engineering, security, computer forensics, etc.

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
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Explanation: A fragmentation is a state of a hard disk in which the most important parts of a single file are stored at different places in the disk. Due to which there is a loss of memory, and the working efficiency of the operating system is also affected.

34) SSTF stands for _____.

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

Hide Answer Workspace

Answer: (b) Shortest Seek Time First

Explanation: SSTF stands for Shortest-Seek-Time-First. In the SSTF algorithm, that request is executed first, whose seek time is the shortest.

35) The PCB is identified by _____.

- a. Real-Number
- b. Binary Number
- c. Store block
- d. Integer Process ID

Hide Answer Workspace

Answer: (d) Integer Process ID

Explanation: PCB is a data structure that is used to store the information of processes. It is identified by an integer process ID (PID).

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

Hide Answer Workspace

Answer: (b) Semaphore

Explanation: Semaphore is an integer variable that is used to prevent threads or processes from accessing a single resource.

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

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

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Explanation: Virtual memory is used to separate the user's logical memory and actual physical memory. Therefore, option (b) is the correct answer.

39) COW stands for _____

- a. Compress of write memory
- b. Copy overwrite
- c. Compress overwrites
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Explanation: COW stands for Copy-Overwrite. Initially, it allows both the parent and child systems to share the same page.

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

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- b. CPU
- c. Monitor
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Answer: (a) Operating system

Explanation: A process is created from a program by the operating system. The OS is software that acts as an interface between a device and users and is also known as system software.

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

Hide Answer Workspace

Answer: (a) Kali Linux

1) 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

Hide Answer Workspace

Answer: (b) It is used to store folders and files hierarchically.

Explanation: In the OS, a directory structure is a container that is used to store folders and files in a hierarchical manner.

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

Hide Answer Workspace

Answer: (c) Preemptive scheduling

Explanation: Round-robin scheduling is a preemptive scheduling algorithm in which a specific time is provided to execute each process. This specific time is called time-slice.

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

- a. Bounded Waiting
- b. Progress
- c. Mutual Exclusion
- d. All of these.

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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.
- c. Windows is a GUI operating system.
- d. None of the these

Hide Answer Workspace

Answer: (c) Windows is a GUI operating system.

Explanation: Windows is a GUI operating system. Windows OS does not require a command to run. Only one mouse is required to run the windows operating system.

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

- a. NTFS
- b. FAT32
- c. exFAT
- d. All of the these

Hide Answer Workspace

Answer: (d) All of the these

Explanation: The following are the types of file systems that support the Windows operating system, such as NTFS, FAT, exFAT, HFS Plus, and EXT.

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

- a. FN + TAB
- b. ALT + TAB
- c. CTRL + TAB
- d. SHIFT + TAB

Hide Answer Workspace

Answer: (b) ALT + TAB

Explanation: The user uses the Alt + Tab button to switch from one window to another in the Windows operating system. Also, the user can use the Ctrl + Tab button to switch from tab to tab in internet explorer.

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

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Explanation: There are the following steps to repair disk in windows NT 4.0:

Step 1: Go to the search button in windows NT 4.0, then type Command Prompt.

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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

Hide Answer Workspace

Answer: (c) From the device manager, click the print button

Explanation: Windows 9x is a generic term that refers to a series of Microsoft windows OS from 1995 to 2000. If you want to print out in Windows 9x, go to the device manager and click the printer option and then print the page.

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

- a. Batch OS
- b. Distributed OS
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Explanation: The network operating system runs on a server. This operating system has some functions that work to connect local area networks and computers.

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Explanation: When a user logs in with an account for the first time, Windows 2000 automatically creates a user's profile in the "Documents and Settings" folder.

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Explanation: Incremental backups take less time and space than differential and complete backups.

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Explanation:

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- b. Six
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Answer: (a) Two

Explanation: There are two types of buffer-overflows: heap-based and stack-based.

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- a. Contiguous
- b. Linked
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Explanation: In the contiguous allocation method, the user has to give the size of the file before creating the file so that the operating system can give contiguous blocks in the disk-based on the size of that file.

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- b. Primality algorithms
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- a. Swapping
- b. Operating system
- c. Memory stack
- d. None of these.

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Explanation: Swapping is a technique in which the process is removed from the main memory and stored in secondary memory. It is used to improve the main memory utilization.

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

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Explanation: ELF stands for "Executable-and-Linkable-Format". The ELF format is used for libraries and executable files in Linux operating systems.

32) What is Kali Linux?

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- c. System Seek Time First
- d. System Shortest Time First

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Answer: (b) Shortest Seek Time First

Explanation: SSTF stands for Shortest-Seek-Time-First. In the SSTF algorithm, that request is executed first, whose seek time is the shortest.

35) The PCB is identified by _____.

- a. Real-Number
- b. Binary Number
- c. Store block
- d. Integer Process ID

Hide Answer Workspace

Answer: (d) Integer Process ID

Explanation: PCB is a data structure that is used to store the information of processes. It is identified by an integer process ID (PID).

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

Hide Answer Workspace

Answer: (b) Semaphore

Explanation: Semaphore is an integer variable that is used to prevent threads or processes from accessing a single resource.

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

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

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Explanation: The mutex is a locking mechanism that ensures that only one thread can occupy the mutex at a time and enter the critical section.

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

Hide Answer Workspace

Answer: (b) It is a separation of user logical memory and physical memory

Explanation: Virtual memory is used to separate the user's logical memory and actual physical memory. Therefore, option (b) is the correct answer.

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- a. Compress of write memory
- b. Copy overwrite
- c. Compress overwrites
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Explanation: COW stands for Copy-Overwrite. Initially, it allows both the parent and child systems to share the same page.

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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

Hide Answer Workspace

Answer: (a) Kali Linux

1. For which of the following offset can be positive or negative?

Answers

1. SEEK_SET
2. SEEK_END
3. SEEK_CUR
4. All of the above
5. None of the above

2. In which of the IPC mechanism, data is not copied from user space to kernel space?

Answers

1. Pipe
2. Message queue
3. Shared memory
4. socket

3. A bootloader is responsible for

- i. loading an operating system kernel and its components
- ii. loading supporting infrastructure into memory
- iii. beginning the kernel's execution

Answers

1. i and ii
2. i and iii
3. ii and iii
4. All of the above

4. In which of the following state change in child process, performing wait allocation?

Answers

1. the child terminated
2. the child was stopped by a signal
3. the child was resumed by a signal
4. All of the above

5. Which of the following is not used to examine and change the signal action?

Answers

1. **signal**
2. sigaction
3. **sigprocmask**
4. All of the above

6. Select the value of mode if O_CREAT flag is provided in open system call to {

Answers

1. **0640**
2. **0644**
3. 0460
4. 0464

7. Select correct option for mutex.

Answers

1. A thread can lock mutex twice.
2. **A thread locking mutex is owner of that mutex.**
3. **Owner can not unlock the mutex.**
4. None of the above

8. What is internal fragmentation?

Answers

1. **process is not utilizing the whole partition allocated to it.**
2. process is utilizing the whole partition allocated to it.
3. **amount of space required for process is not available.**
4. amount of space required for process is available, but not contiguous.

9. Physical memory : _____ :: Logical Memory : _____

Answers

1. Pages, Frames
2. Frames, Pages
3. Pages, Fragments
4. fragments, Frames

10. If the size of logical address space is 2 to the power of m, and a page size

◀ ▶

Answers

1. m, n
2. n, m
3. m - n, m
4. m - n, n

11. LRU page replacement algorithm suffers from Belady's anomaly.

Answers

1. true
2. false

12. Which of the following is journaling file system

Answers

1. JFS
2. UFS
3. ext2
4. ext3

13. Thrashing

Answers

1. reduces page I/O
2. decreases the degree of multiprogramming
3. implies excessive page I/O
4. improves the system performance

14. While fork(), the child's set of pending signals is initially ____.

Answers

1. filled with same as parent
2. empty
3. filled except masked signals in parent
4. None of the above

15. The child does not inherit _____.

Answers

1. semaphore adjustments from its parent
2. its parent's memory locks
3. timers from its parent
4. All of the above
5. None of the above

16. Which of the following architecture does not support embedded operating syst



Answers

1. ARM
2. AVR32
3. MIPS
4. None of the above

17. _____ provide the information about the existence of files, their



Answers

1. Memory Table
2. I/O Table
3. File Tables
4. Process Tables

```
18. #include <stdio.h>
    #include <unistd.h>
    int main()
    {
        fork();
        fork();
        fork();
        printf(" A New Process Created.");
        return 0;
    }
```

How many times Above message "A New Process Created" is printed?

Answers

1. 1
2. 3
3. 8
4. 16

19. sigprocmask() system call does _____.

Answers

1. change the process signal mask.
2. retrieve the existing mask
3. Both of the above
4. None of the above

20. Spinlocks are intended to provide _____ only.

Answers

1. Mutual Exclusion
2. Bounded Waiting
3. Aging
4. Progress

21. Which of the following not belong to exec() family?

Answers

1. execv();
2. execvp();
3. execvpe();
4. execlv();

22. msgsnd() returns an integer, which of the following is true statement.

Answers

1. Return value > 1 indicates a correct send.
2. Return value = 0 indicates a correct send
3. Both of above
4. Return value = -1 indicates an error has occurred



_____ is a technique of gradually increasing the priority of the process

Answers

1. Starvation
2. Waiting queue
3. Aging
4. Non of the above

24. Multiple source files are compiled together to form a single kernel binary :

Answers

1. Micro-kernel
2. Monolithic kernel
3. Modular kernel
4. Hybrid kernel

25. Named pipe or FIFO can be created by _____ command.

Answers

1. pipe
2. mkfifo
3. mkpipe
4. makefifo

26. Bankers algorithm is an example of _____

Answers

1. deadlock prevention
 2. deadlock avoidance
 3. deadlock detection
 4. deadlock recovery
-

27. Preemption is _____

Answers

1. forced deallocation of the CPU from a program which is executing on the CPU
2. release of CPU by a program after the completing its task
3. forced allotment of CPU by a program to itself
4. a program is terminating itself due to detection of error

28. Which one of the following bootloader is not used by linux?

Answers

1. GRUB
 2. LILO
 3. NTLDR
 4. None of the mentioned
-

29. Each thread has its own user stack and no kernel stack.

Answers

1. True
 2. False
-

30. Thread synchronization is required because _____

Answers

1. all threads of a process share the same address space
2. all threads of a process share the same global variables
3. all threads of a process can share the same files
4. all of the mentioned

31. Mutex Functionality :

Answers

1. based up on locking mechanism
2. based up on signalling mechanism
3. both A and B
4. None of the above

32. On success, pthread_join() returns :

Answers

1. 0
2. 1
3. Error No
4. None of the above


33. fork() returns non zero value in child process and zero in parent process.

Answers

1. False
2. True

34. Select odd option from below

Answers

1. `execl("./cmdline", "cmdline", "one", "two", "three", "four", NULL);`
2. `char *args[] = { "cmdline", "one", "two", "three", NULL }; execv("./cmdline",`

3. `execlp("ps", "ps", "-e", "-o", "pid,ppid,cmd");`
4. None of the above

35. Which is Fastest IPC mechanism

Answers

1. FIFO
2. Pipe
3. Shared Memory
4. Queue

36. The two ways of aborting processes and eliminating deadlocks are _____

Answers

1. Abort all deadlocked processes
2. Abort all processes
3. Abort one process at a time until the deadlock cycle is eliminated
4. All of the mentioned

37. The segment limit contains the _____

Answers

1. starting logical address of the process
2. starting physical address of the segment in memory
3. segment length
4. none of the mentioned

38. In the Zero capacity queue _____

Answers

1. the queue can store at least one message
2. the sender blocks until the receiver receives the message
3. the sender keeps sending and the messages don't wait in the queue
4. none of the mentioned

39. What will happen if a non-recursive mutex is locked more than once?

Answers

1. Starvation
2. Deadlock
3. Aging
4. Signaling

40. The signal operation of the semaphore basically works on the basic _____ :



Answers

1. continue()
2. start()
3. wakeup()
4. getup()