

Multiple Choice Questions On Operating System Part-1

1) Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called _____

- 1 Static loading
- 2 Dynamic loading
- 3 Dynamic linking
- 4 Overlays

Ans) 3

2) Which of the following is crucial time while accessing data on the disk?

- 1 Seek time
- 2 Rotational time
- 3 Transmission time
- 4 Waiting time

Ans) 1

3) The host repeatedly checks if the controller is busy until it is not. It is in a loop that status register's busy bit becomes clear. This is called _____ and a mechanism for the hardware controller to notify the CPU that it is ready is called _____.

- 1 Interrupt and Polling
- 2 Polling and Spooling
- 3 Polling and Interrupt
- 4 Deadlock and Starvation

Ans) 3

4) Unix Operating System is an _____.

- 1 Time Sharing Operating System
- 2 Multi-User Operating System
- 3 Multi-tasking Operating System
- 4 All the Above

Ans) 4

5) Which of the following memory allocation scheme suffers from External fragmentation?

- 1 Segmentation
- 2 Pure demand paging
- 3 Swapping
- 4 Paging

Ans) 1

6) Information about a process is maintained in a _____.

- 1 Stack
- 2 Translation Lookaside Buffer
- 3 Process Control Block
- 4 Program Control Block

Ans) 3

7) Distributed OS works on the _____ principle.

- 1 File Foundation
- 2 Single system image
- 3 Multi system image
- 4 Networking image

Ans) 2

8) The problem of fragmentation arises in _____.

- 1 Static storage allocation
- 2 Stack allocation storage
- 3 Stack allocation with dynamic binding
- 4 Heap allocation

Ans) 4

9) Which file system does DOS typically use ?

- 1 FAT16
- 2 FAT32
- 3 NTFS
- 4 WNFS

Ans) 1

10) The program is known as _____ which interacts with the inner part of called kernel.

- 1 Compiler
- 2 Device Driver
- 3 Protocol
- 4 Shell

Ans) 4

11) The time taken by the disk arm to locate the specific address of a sector for getting information is called _____.

- 1 Rotational Latency
- 2 Seek Time
- 3 Search Time
- 4 Response Time

Ans) 2

12) Which file system does Windows 95 typically use ?

- 1 FAT16
- 2 FAT32
- 3 NTFS
- 4 LMFS

Ans) 2

13) Identify the odd thing in the services of operating system.

- 1 Accounting
- 2 Protection
- 3 Error detection and correction
- 4 Dead lock handling

Ans) 3

14) Cryptography technique is used in _____.

- 1 Polling
- 2 Job Scheduling
- 3 Protection
- 4 File Management

Ans) 3

15) Which of the following is not advantage of multiprogramming?

- 1 Increased throughput
- 2 Shorter response time
- 3 Decreased operating system overhead
- 4 Ability to assign priorities to jobs

Ans) 3

16) In _____ OS, the response time is very critical.

- 1 Multitasking
- 2 Batch
- 3 Online
- 4 Real-time

Ans) 4

17) An optimal scheduling algorithm in terms of minimizing the average waiting time of a given set of processes is _____.

- 1 FCFS scheduling algorithm
- 2 Round robin scheduling algorithm
- 3 Shortest job - first scheduling algorithm
- 4 None of the above

Ans) 3

18) Real time systems are _____.

- 1 Primarily used on mainframe computers
- 2 Used for monitoring events as they occur
- 3 Used for program development
- 4 Used for real time interactive users

Ans) 2

19) Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?

- 1 Time-sharing
- 2 SPOOLing
- 3 Preemptive scheduling
- 4 Multiprogramming

Ans) 4

20) Inter process communication can be done through _____.

- 1 Mails
- 2 Messages
- 3 System calls
- 4 Traps

Ans) 2

21) In Priority Scheduling a priority number (integer) is associated with each process. The CPU is allocated to the process with the highest priority (smallest integer = highest priority). The problem of, Starvation ? low priority processes may never execute, is resolved by _____.

- 1 Terminating the process.
- 2 Aging
- 3 Mutual Exclusion
- 4 Semaphore

Ans) 2

22) CPU performance is measured through _____.

- 1 Throughput
- 2 MHz
- 3 Flaps
- 4 None of the above

Ans) 1

23) PCB =

- 1 Program Control Block
- 2 Process Control Block
- 3 Process Communication Block
- 4 None of the above

Ans) 2

24) Software is a program that directs the overall operation of the computer, facilitates its use and interacts with the user. What are the different types of this software ?

- 1 Operating system
- 2 Language Compiler
- 3 Utilities
- 4 All of the above

Ans) 4

25) A _____ is a software that manages the time of a microprocessor to ensure that all time critical events are processed as

efficiently as possible. This software allows the system activities to be divided into multiple independent elements called tasks.

- 1 Kernel
- 2 Shell
- 3 Processor
- 4 Device Driver

Ans) 1

26) The primary job of the operating system of a computer is to _____.

- 1 Command Resources
- 2 Manage Resources
- 3 Provide Utilities
- 4 Be user friendly

Ans) 2

27) With the round robin CPU scheduling in a time-shared system _____.

- 1 Using very large time slice degenerates in to first come first served algorithm
- 2 Using extremely small time slices improve performance
- 3 Using extremely small time slices degenerate in to last in first out algorithm
- 4 Using medium sized time slices leads to shortest request time first algorithm

Ans) 1

28) Which of the following is a criterion to evaluate a scheduling algorithm?

- 1 CPU Utilization: Keep CPU utilization as high as possible.
- 2 Throughput: number of processes completed per unit time.
- 3 Waiting Time: Amount of time spent ready to run but not running.
- 4 All of the above

Ans) 4

29) Which of the following is contained in Process Control Block (PCB)?

- 1 Process Number
- 2 List of Open files
- 3 Memory Limits
- 4 All of the Above

Ans) 4

30) Super computers typically employ _____.

- 1 Real time Operating system
- 2 Multiprocessors OS
- 3 desktop OS
- 4 None of the above

Ans) 2

Multiple Choice Questions On Operating System Part-2

1) Consider the two statements.

(A) A network operating system, the users access remote resources in the same manner as local resource.

(B) In a distributed operating system, the user can access remote resources either by logging into the appropriate remote machine or transferring data from the remote machine to their own machine. Which of the statement is true?

- 1 A true, B false
- 2 B true, A false
- 3 Both A and B false
- 4 Both A and B true

Ans) 3

2) Using Priority Scheduling algorithm, find the average waiting time for the following set of processes given with their priorities in the order: Process : Burst Time : Priority respectively .

P1 : 10 : 3 ,

P2 : 1 : 1 ,

P3 : 2 : 4 ,

P4 : 1 : 5 ,

P5 : 5 : 2.

1 8 milliseconds

2 8.2 milliseconds

3 7.75 milliseconds

4 3 milliseconds

Ans) 2

3) Which of the following will determine your choice of systems software for your computer ?

1 Is the applications software you want to use compatible with it ?

2 Is it expensive ?

3 Is it compatible with your hardware ?

4 Both 1 and 3

Right Ans) 4

Associate Ans) 4

4) What is a shell ?

1 It is a hardware component

2 It is a command interpreter

3 It is a part in compiler

4 It is a tool in CPU scheduling

Ans) 2

5) The operating system manages _____.

1 Memory

2 Processor

3 Disk and I/O devices

4 All of the above

Ans) 4

6) The Hardware mechanism that enables a device to notify the CPU is called _____.

1 Polling

2 Interrupt

3 System Call

4 None of the above

Ans) 2

7) _____ begins at the root and follows a path down to the specified file

- 1 Relative path name
- 2 Absolute path name
- 3 Standalone name
- 4 All of the above

Ans) 2

8) Process State is a part of

- 1 Process Control block
- 2 Inode
- 3 File Allocation Table
- 4 None of the above

Ans) 1

9) Virtual Memory is commonly implemented by _____.

- 1 Segmentation
- 2 Swapping
- 3 Demand Paging
- 4 None of the above

Ans) 3

10) Virtual memory is _____.

- 1 An extremely large main memory
- 2 An extremely large secondary memory
- 3 An illusion of extremely large main memory
- 4 A type of memory used in super computers.

Ans) 3

11) The kernel keeps track of the state of each task by using a data structure called ____

- 1 Process control block
- 2 User control block
- 3 Memory control block
- 4 None of the above

Ans) 1

12) A binary semaphore

- 1 has the values one or zero
- 2 is essential to binary computers
- 3 is used only for synchronisation
- 4 is used only for mutual exclusion

Ans) 1

13) _____ page replacement algorithm suffers from Belady's anomaly.

- 1 LRU
- 2 MRU

3 FIFO

4 LIFO

Ans) 3

14) A program at the time of executing is called _____.

1 Dynamic program

2 Static program

3 Binded Program p

4 A Process

Ans) 4

15) _____ is a high speed cache used to hold recently referenced page table entries a part of paged virtual memory

1 Translation Lookaside buffer

2 Inverse page table

3 Segmented page table

4 All the above

Ans) 1

16) If you don't know which version of MS-DOS you are working with, which command will you use after booting your operating system ?

1 Format command

2 FAT command

3 VER command

4 DISK command

Ans) 3

17) _____ OS pays more attention on the meeting of the time limits.

1 Distributed

2 Network

3 Real time

4 Online

Ans) 3

18) A process said to be in _____ state if it was waiting for an event that will never occur.

1 Safe

2 Unsafe

3 Starvation

4 Dead lock

Ans) 4

19) The removal of process from active contention of CPU and reintroduce them into memory later is known as _____.

- 1 Interrupt
 - 2 Swapping
 - 3 Signal
 - 4 Thread
- Ans) 2

20) The problem of thrashing is effected scientifically by _____.

- 1 Program structure
- 2 Program size
- 3 Primary storage size
- 4 None of the above

Ans) 1

21) Paging _____.

- 1 solves the memory fragmentation problem
- 2 allows modular programming
- 3 allows structured programming
- 4 avoids deadlock

Ans) 1

22) Real time systems are _____.

- 1 Primarily used on mainframe computers
- 2 Used for monitoring events as they occur
- 3 Used for program development
- 4 Used for real time interactive users

Ans) 2

23) A thread is a _____ process .

- 1 Heavy Weight
- 2 Mutliprocess
- 3 Inter Thread
- 4 Light wieght

Ans) 4

24) _____ allocates the largest hole (free fragmant) available in the memory.

- 1 Best Fit
- 2 Worst Fit
- 3 First Fit
- 4 None of the above

Ans) 2

25) Number of CPU registers in a system depends on _____.

- 1 Operating system
- 2 Computer Architecture

3 Computer Organization

4 None of the above

Ans) 2

26) A major problem with priority scheduling is _____.

1 Definite blocking

2 Starvation

3 Low priority

4 None of the above

Ans) 2

27) A _____ contains information about the file, including ownership, permissions, and location of the file contents.

1 File Control Block (FCB)

2 File

3 Device drivers

4 File system

Ans) 1

28) Which directory implementation is used in most Operating System?

1 Single level directory structure

2 Two level directory structure

3 Tree directory structure

4 Acyclic directory structure

Ans) 3

29) The term " Operating System " means _____.

1 A set of programs which controls computer working

2 The way a computer operator works

3 Conversion of high-level language in to machine level language

4 The way a floppy disk drive operates

Ans) 1

30) The operating system of a computer serves as a software interface between the user and the _____.

1 Hardware

2 Peripheral

3 Memory

4 Screen

Ans) 1

Multiple Choice Questions On Operating System Part-3

1) The collection of processes on the disk that is waiting to be brought into memory for execution forms the _____

1 Ready queue

2 Device queue

3 Input queue
4 Priority queue
Ans) 3

2) Demand paged memory allocation
1 allows the virtual address space to be independent of the physical memory
2 allows the virtual address space to be a multiple of the physical memory size
3 allows deadlock to be detected in paging schemes
4 is present only in Windows NT
Ans) 1

3) Which is not an Operating System ?
1 Windows 95
2 MS-DOS
3 Windows 3.1
4 Windows 2000
Ans) 3

4) The operating system manages _____.
1 Memory
2 Processor
3 Disk and I/O devices
4 All of the above
Ans) 4

5) It is not the layer of the Operating system.
1 Kernel
2 Shell
3 Application program
4 Critical Section
Ans) 4

6) _____ begins at the root and follows a path down to the specified file
1 Relative path name
2 Absolute path name
3 Standalone name
4 All of the above
Ans) 2

7) Who is called a supervisor of computer activity ?
1 CPU
2 Operating system
3 Control unit
4 Application Program
Ans) 2

8) Consider the two statements. (A) Protection is an internal problem. (B) Security is considered as an external environment within which the system works. Which of the statement is not true?
1 Only A
2 Only B
3 Both A and B
4 None of the above
Ans) 4

9) The process related to process control, file management, device management, information about system and communication that is requested by any higher level language can be performed by _____.
1 Editors
2 Compilers
3 System Call

4 Caching

Ans) 3

10) Mutual exclusion

- 1 if one process is in a critical region others are excluded
- 2 prevents deadlock
- 3 requires semaphores to implement
- 4 is found only in the Windows NT operating system

Ans) 1

11) Which scheduler controls the degree of multiprogramming?

- 1 Short term scheduler
- 2 Long term scheduler
- 3 Middle term scheduler
- 4 None of the above

Ans) 2

12) What is the name of the software which can be legally compiled and often used for free?

- 1 Shareware program
- 2 Public domain program
- 3 Firmware program
- 4 Mind Ware

Ans) 2

13) The problem of fragmentation arises in _____.

- 1 Static storage allocation
- 2 Stack allocation storage
- 3 Stack allocation with dynamic binding
- 4 Heap allocation

Ans) 4

14) In interactive environments such as time-sharing systems, the primary requirement is to provide reasonably good response time and in general, to share system resources equitably. In such situations, the scheduling algorithm that is most popularly applied is _____.

- 1 Shortest Remaining Time Next (SRTN) Scheduling
- 2 Priority Based Preemptive Scheduling
- 3 Round Robin Scheduling
- 4 None of the above

Ans) 3

15) Thrashing occurs _____.

- 1 when excessive swapping takes place
- 2 when you thrash your computer
- 3 whenever deadlock occurs
- 4 when no swapping takes place

Ans) 1

16) Boundary registers _____.

- 1 Are available in temporary program variable storage
- 2 Are only necessary with fixed partitions
- 3 Track the beginning and ending the program
- 4 Track page boundaries

Ans) 3

17) The principle of locality of reference justifies the use of _____.

- 1 Virtual Memory
- 2 Interrupts
- 3 Main memory
- 4 Cache memory

Ans) 4

18) The section of code which accesses shared variables is called as _____.

- 1 Critical section
- 2 Block
- 3 Procedure
- 4 Semaphore

Ans) 1

19) Thrashing _____.

- 1 Reduces page I/O
- 2 Decreases the degree of multiprogramming
- 3 Implies excessive page I/O
- 4 Improve the system performance

Ans) 3

20) In memory management , a technique called as paging, physical memory is broken into fixed-sized blocks called _____.

- 1 Pages
- 2 Frames
- 3 Blocks
- 4 Segments

Ans) 2

21) The state of a process after it encounters an I/O instruction is _____.

- 1 Ready
- 2 Blocked/Waiting
- 3 Idle
- 4 Running

Ans) 2

22) In one of the deadlock prevention methods, impose a total ordering of all resource types, and require that each process requests resources in an increasing order of enumeration. This violates the _____ condition of deadlock

- 1 Mutual exclusion
- 2 Hold and Wait
- 3 Circular Wait
- 4 No Preemption

Ans) 3

23) Which of the following file name extension suggests that the file is Backup copy of another file ?

- 1 TXT
- 2 COM
- 3 BAS
- 4 BAK

Ans) 4

24) The degree of Multiprogramming is controlled by

- 1 CPU Scheduler
- 2 Context Switching
- 3 Long-term Scheduler
- 4 Medium term Scheduler

Ans) 3

25) The higher versions of operating systems are so written that programs designed for earlier versions can still be run. What is it called ?

- 1 Up gradiability
- 2 Upward mobility
- 3 Universality
- 4 Upward Compatibility

Ans) 4

26) A scheduling algorithm is fair

- 1 if no process faces starvation
- 2 if a process is starved, detect it and run it with high priority
- 3 if it uses semaphores
- 4 only if a queue is used for scheduling

Ans) 1

27) A critical region

- 1 is a piece of code which only one process executes at a time
- 2 is a region prone to deadlock
- 3 is a piece of code which only a finite number of processes execute
- 4 is found only in Windows NT operation system

Ans) 1

28) Semaphore can be used for solving _____.

- 1 Wait & signal
- 2 Deadlock
- 3 Synchronization
- 4 Priority

Ans) 3

29) The operating system of a computer serves as a software interface between the user and the _____.

- 1 Hardware
- 2 Peripheral
- 3 Memory
- 4 Screen

Ans) 1

30) What is the name of the software which deals with the running of the actual computer and not with the programming problems?

- 1 Operating system
- 2 System program
- 3 Object program
- 4 Source program

Ans) 2

Multiple Choice Questions On Operating System Part-4

1) Round robin scheduling is essentially the preemptive version of _____.

- 1 FIFO
- 2 Shortest job first
- 3 Shortes remaining
- 4 Longest time first

Right Ans) 1

2) A page fault occurs

- 1 when the page is not in the memory
- 2 when the page is in the memory
- 3 when the process enters the blocked state
- 4 when the process is in the ready state

Right Ans) 1

3) Which of the following will determine your choice of systems software for your computer ?

- 1 Is the applications software you want to use compatible with it ?
- 2 Is it expensive ?
- 3 Is it compatible with your hardware ?
- 4 Both 1 and 3

Right Ans) 4

4) Let S and Q be two semaphores initialized to 1, where P0 and P1 processes the following statements wait(S);wait(Q); ---; signal(S);signal(Q) and wait(Q); wait(S);---;signal(Q);signal(S); respectively. The above situation depicts a _____ .

- 1 Semaphore
 - 2 Deadlock
 - 3 Signal
 - 4 Interrupt
- Right Ans) 2

5) What is a shell ?

- 1 It is a hardware component
 - 2 It is a command interpreter
 - 3 It is a part in compiler
 - 4 It is a tool in CPU scheduling
- Right Ans) 2

6) Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called _____

- 1 Static loading
 - 2 Dynamic loading
 - 3 Dynamic linking
 - 4 Overlays
- Right Ans) 3

7) In the blocked state

- 1 the processes waiting for I/O are found
 - 2 the process which is running is found
 - 3 the processes waiting for the processor are found
 - 4 none of the above
- Right Ans) 1

8) What is the memory from 1K - 640K called ?

- 1 Extended Memory
 - 2 Normal Memory
 - 3 Low Memory
 - 4 Conventional Memory
- Right Ans) 4

9) Virtual memory is _____.

- 1 An extremely large main memory
 - 2 An extremely large secondary memory
 - 3 An illusion of extremely large main memory
 - 4 A type of memory used in super computers.
- Right Ans) 3

10) The process related to process control, file management, device management, information about system and communication that is requested by any higher level language can be performed by _____.

- 1 Editors
 - 2 Compilers
 - 3 System Call
 - 4 Caching
- Right Ans) 3

11) If the Disk head is located initially at 32, find the number of disk moves required with FCFS if the disk queue of I/O blocks requests are 98,37,14,124,65,67.

- 1 310
- 2 324
- 3 315
- 4 321

Right Ans) 4

12) Multiprogramming systems _____.

- 1 Are easier to develop than single programming systems
- 2 Execute each job faster
- 3 Execute more jobs in the same time
- 4 Are used only on large main frame computers

Right Ans) 3

13) Which is not the state of the process ?

- 1 Blocked
- 2 Running
- 3 Ready
- 4 Privileged

Right Ans) 4

14) The solution to Critical Section Problem is : Mutual Exclusion, Progress and Bounded Waiting.

- 1 The statement is false
- 2 The statement is true.
- 3 The statement is contradictory.
- 4 None of the above

Right Ans) 2

15) The problem of thrashing is effected scientifically by _____.

- 1 Program structure
- 2 Program size
- 3 Primary storage size
- 4 None of the above

Right Ans) 1

16) The state of a process after it encounters an I/O instruction is _____.

- 1 Ready
- 2 Blocked/Waiting
- 3 Idle
- 4 Running

Right Ans) 2

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

- 1 Output
- 2 Throughput
- 3 Efficiency
- 4 Capacity

Right Ans) 2

18) _____ is the situation in which a process is waiting on another process, which is also waiting on another process ... which is waiting on the first process. None of the processes involved in this circular wait are making progress.

- 1 Deadlock
- 2 Starvation
- 3 Dormant
- 4 None of the above

Right Ans) 1

19) Which of the following file name extension suggests that the file is Backup copy of another file ?

- 1 TXT
- 2 COM
- 3 BAS
- 4 BAK

Right Ans) 4

20) Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?

- 1 Time-sharing
- 2 SPOOLing
- 3 Preemptive scheduling
- 4 Multiprogramming

Right Ans) 4

21) A critical region

- 1 is a piece of code which only one process executes at a time
- 2 is a region prone to deadlock
- 3 is a piece of code which only a finite number of processes execute
- 4 is found only in Windows NT operation system

Right Ans) 1

22) The mechanism that bring a page into memory only when it is needed is called _____

- 1 Segmentation
- 2 Fragmentation
- 3 Demand Paging
- 4 Page Replacement

Right Ans) 3

23) PCB =

- 1 Program Control Block
- 2 Process Control Block
- 3 Process Communication Block
- 4 None of the above

Right Ans) 2

24) FIFO scheduling is _____.

- 1 Preemptive Scheduling
- 2 Non Preemptive Scheduling
- 3 Deadline Scheduling
- 4 Fair share scheduling

Right Ans) 2

25) Switching the CPU to another Process requires to save state of the old process and loading new process state is called as _____.

- 1 Process Blocking
- 2 Context Switch
- 3 Time Sharing
- 4 None of the above

Right Ans) 2

26) Which directory implementation is used in most Operating System?

- 1 Single level directory structure
- 2 Two level directory structure
- 3 Tree directory structure
- 4 Acyclic directory structure

Right Ans) 3

27) The Banker's algorithm is used

- 1 to prevent deadlock in operating systems
- 2 to detect deadlock in operating systems
- 3 to rectify a deadlocked state
- 4 none of the above

Right Ans) 1

28) A thread

- 1 is a lightweight process where the context switching is low

2 is a lightweight process where the context switching is high
3 is used to speed up paging
4 none of the above
Right Ans) 1

29) _____ is a high level abstraction over Semaphore.
1 Shared memory
2 Message passing
3 Monitor
4 Mutual exclusion
Right Ans) 3

30) A tree structured file directory system
1 allows easy storage and retrieval of file names
2 is a much debated unnecessary feature
3 is not essential when we have millions of files
4 none of the above
Right Ans) 1

Multiple Choice Questions On Operating System Part-5

1) Using Priority Scheduling algorithm, find the average waiting time for the following set of processes given with their priorities in the order: Process : Burst Time : Priority respectively . P1 : 10 : 3 , P2 : 1 : 1 , P3 : 2 : 4 , P4 : 1 : 5 , P5 : 5 : 2.
1 8 milliseconds
2 8.2 milliseconds
3 7.75 milliseconds
4 3 milliseconds
Right Ans) 2

2) Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called _____
1 Static loading
2 Dynamic loading
3 Dynamic linking
4 Overlays
Right Ans) 3

3) In the running state
1 only the process which has control of the processor is found
2 all the processes waiting for I/O to be completed are found
3 all the processes waiting for the processor are found
4 none of the above
Right Ans) 1

4) The Purpose of Co-operating Process is _____.
1 Information Sharing
2 Convenience
3 Computation Speed-Up
4 All of the above
Right Ans) 4

5) The kernel of the operating system remains in the primary memory because _____.
1 It is mostly called (used)
2 It manages all interrupt calls
3 It controls all operations in process
4 It is low level
Right Ans) 1

6) The process related to process control, file management, device management, information about system and communication that is requested by any higher level language can be performed by _____.

- 1 Editors
 - 2 Compilers
 - 3 System Call
 - 4 Caching
- Right Ans) 3

7) Which of the following disk scheduling techniques has a drawback of starvation ?

- 1 SCAN
- 2 SSTF
- 3 FCFS
- 4 LIFO

Right Ans) 2

8) Multiprogramming systems _____.

- 1 Are easier to develop than single programming systems
- 2 Execute each job faster
- 3 Execute more jobs in the same time
- 4 Are used only on large main frame computers

Right Ans) 3

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

- 1 Lengthened; Shortened
- 2 Shortened; Lengthened
- 3 Shortened; Shortened
- 4 Shortened; Unchanged

Right Ans) 2

10) Multiprocessing _____.

- 1 Make the operating system simpler
- 2 Allows multiple processes to run simultaneously
- 3 Is completely understood by all major computer vendors
- 4 Allows the same computer to have the multiple processors

Right Ans) 4

11) Which is not the state of the process ?

- 1 Blocked
- 2 Running
- 3 Ready
- 4 Privileged

Right Ans) 4

12) A set of resources' allocations such that the system can allocate resources to each process in some order, and still avoid a deadlock is called _____.

- 1 Unsafe state
- 2 Safe state
- 3 Starvation
- 4 Greedy allocation

Right Ans) 2

13) The principle of locality of reference justifies the use of _____.

- 1 Virtual Memory
- 2 Interrupts
- 3 Main memory
- 4 Cache memory

Right Ans) 4

14) What is the first step in performing an operating system upgrade ?

- 1 Partition the drive
- 2 Format the drive

3 Backup critical data
4 Backup old operating system
Right Ans) 3

15) The technique, for sharing the time of a computer among several jobs, which switches jobs so rapidly such that each job appears to have the computer to itself, is called _____.

- 1 Time Sharing
- 2 Time out
- 3 Time domain
- 4 Multitasking

Right Ans) 1

16) In a virtual memory environment

- 1 segmentation and page tables are stored in the cache and do not add any substantial overhead
- 2 slow down the computer system considerable
- 3 segmentation and page tables are stored in the RAM
- 4 none of the above

Right Ans) 3

17) If all page frames are initially empty, and a process is allocated 3 page frames in real memory and references its pages in the order 1 2 3 2 4 5 2 3 2 4 1 and the page replacement is FIFO, the total number of page faults caused by the process will be _____.

- 1 10
- 2 7
- 3 8
- 4 9

Right Ans) 4

18) Situations where two or more processes are reading or writing some shared data and the final results depends on the order of usage of the shared data, are called _____.

- 1 Race conditions
- 2 Critical section
- 3 Mutual exclusion
- 4 Dead locks

Right Ans) 1

19) When two or more processes attempt to access the same resource a _____ occurs.

- 1 Critical section
- 2 Fight
- 3 Communication problem
- 4 Race condition

Right Ans) 4

20) Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?

- 1 Time-sharing
- 2 SPOOLing
- 3 Preemptive scheduling
- 4 Multiprogramming

Right Ans) 4

21) _____ allocates the largest hole (free fragment) available in the memory.

- 1 Best Fit
- 2 Worst Fit
- 3 First Fit
- 4 None of the above

Right Ans) 2

22) A process is starved

- 1 if it is permanently waiting for a resource

2 if semaphores are not used
3 if a queue is not used for scheduling
4 if demand paging is not properly implemented
Right Ans) 1

23) The degree of Multiprogramming is controlled by
1 CPU Scheduler
2 Context Switching
3 Long-term Scheduler
4 Medium term Scheduler
Right Ans) 3

24) The time taken to bring the desired track/cylinder under the head is _____.
1 Seek time
2 Latency time
3 Transfer time
4 Read time
Right Ans) 1

25) Replace the page that will not be used for the longest period of time. This principle is adopted by _____.
1 FIFO Page replacement algorithm
2 Optimal Page replacement algorithm
3 Round robin scheduling algorithm
4 SCAN scheduling algorithm
Right Ans) 3

26) Which of the following is a criterion to evaluate a scheduling algorithm?
1 CPU Utilization: Keep CPU utilization as high as possible.
2 Throughput: number of processes completed per unit time.
3 Waiting Time: Amount of time spent ready to run but not running.
4 All of the above
Right Ans) 4

27) The operating system of a computer serves as a software interface between the user and the _____.
1 Hardware
2 Peripheral
3 Memory
4 Screen
Right Ans) 1

28) Super computers typically employ _____.
1 Real time Operating system
2 Multiprocessors OS
3 desktop OS
4 None of the above
Right Ans) 2

29) 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 _____.
1 Local Procedure Call
2 Inter Process Communication
3 Remote Procedure Call
4 Remote Machine Invocation
Right Ans) 3

30) A process is
1 program in execution
2 a concurrent program
3 any sequential program

4 something which prevents deadlock

Right Ans) 1

Multiple Choice Questions On Operating System Part-6

1) The high paging activity is called _____.

1 Inter process communication

2 Thrashing

3 Context Switch

4 None of the above

Right Ans) 2

2) The Hardware mechanism that enables a device to notify the CPU is called _____.

1 Polling

2 Interrupt

3 System Call

4 None of the above

Right Ans) 2

3) In the running state

1 only the process which has control of the processor is found

2 all the processes waiting for I/O to be completed are found

3 all the processes waiting for the processor are found

4 none of the above

Right Ans) 1

4) Which of the following is crucial time while accessing data on the disk?

1 Seek time

2 Rotational time

3 Transmission time

4 Waiting time

Right Ans) 1

5) Process State is a part of

1 Process Control block

2 Inode

3 File Allocation Table

4 None of the above

Right Ans) 1

6) Who is called a supervisor of computer activity ?

1 CPU

2 Operating system

3 Control unit

4 Application Program

Right Ans) 2

7) Virtual memory is _____.

1 An extremely large main memory

2 An extremely large secondary memory

3 An illusion of extremely large main memory

4 A type of memory used in super computers.

Right Ans) 3

8) The kernel keeps track of the state of each task by using a data structure called ____

1 Process control block

2 User control block

3 Memory control block

4 None of the above

Right Ans) 1

9) Which of the following disk scheduling techniques has a drawback of starvation ?

1 SCAN

2 SSTF

3 FCFS

4 LIFO

Right Ans) 2

10) A binary semaphore

1 has the values one or zero

2 is essential to binary computers

3 is used only for synchronisation

4 is used only for mutual exclusion

Right Ans) 1

11) _____ page replacement algorithm suffers from Belady's anomaly.

1 LRU

2 MRU

3 FIFO

4 LIFO

Right Ans) 3

12) _____ is a high speed cache used to hold recently referenced page table entries a part of paged virtual memory

1 Translation Lookaside buffer

2 Inverse page table

3 Segmented page table

4 All the above

Right Ans) 1

13) _____ does the job of allocating a process to the processor.

1 Long term scheduler

2 Short term scheduler

3 Medium term scheduler

4 Dispatcher

Right Ans) 4

14) In interactive environments such as time-sharing systems, the primary requirement is to provide reasonably good response time and in general, to share system resources equitably. In such situations, the scheduling algorithm that is most popularly applied is _____.

1 Shortest Remaining Time Next (SRTN) Scheduling

2 Priority Based Preemptive Scheduling

3 Round Robin Scheduling

4 None of the above

Right Ans) 3

15) In the multi-programming environment, the main memory consisting of _____ number of process.

1 Greater than 100

2 Only one

3 Greater than 50

4 More than one

Right Ans) 4

16) In a multithreaded environment _____.

1 Each thread is allocated with new memory from main memory.

2 Main thread terminates after the termination of child threads.

3 Every process can have only one thread.

4 None of the above

Right Ans) 2

17) Which of the following statement is not true?

- 1 Multiprogramming implies multitasking
- 2 Multi-user does not imply multiprocessing
- 3 Multitasking does not imply multiprocessing
- 4 Multithreading implies multi-user

Right Ans) 4

18) In one of the deadlock prevention methods, impose a total ordering of all resource types, and require that each process requests resources in an increasing order of enumeration. This violates the _____ condition of deadlock

- 1 Mutual exclusion
- 2 Hold and Wait
- 3 Circular Wait
- 4 No Preemption

Right Ans) 3

19) In the _____ method of data transfer, the participation of the processor is eliminated during data transfer.

- 1 Buffering
- 2 Caching
- 3 Direct Memory Access
- 4 Indirect Memory Access

Right Ans) 3

20) A thread is a _____ process .

- 1 Heavy Weight
- 2 Mutliprocess
- 3 Inter Thread
- 4 Light wieght

Right Ans) 4

21) Data reside in file on disk under DOS environment, which of the following file name is invalid ?

- 1 OSCONCEPTS.doc
- 2 RAW
- 3 COMPAQ.BOOK
- 4 JUMPSTART.BOS

Right Ans) 3

22) In Priority Scheduling a priority number (integer) is associated with each process. The CPU is allocated to the process with the highest priority (smallest integer = highest priority). The problem of, Starvation ? low priority processes may never execute, is resolved by _____.

- 1 Terminating the process.
- 2 Aging
- 3 Mutual Exclusion
- 4 Semaphore

Right Ans) 2

23) CPU Scheduling is the basis of _____ operating system

- 1 Batch
- 2 Real time
- 3 Multiprogramming
- 4 Monoprogramming

Right Ans) 3

24) A major problem with priority scheduling is _____.

- 1 Definite blocking
- 2 Starvation
- 3 Low priority
- 4 None of the above

Right Ans) 2

25) _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.

- 1 Long term
- 2 Short term
- 3 Medium term
- 4 None of the above

Right Ans) 1

26) Which directory implementation is used in most Operating System?

- 1 Single level directory structure
- 2 Two level directory structure
- 3 Tree directory structure
- 4 Acyclic directory structure

Right Ans) 3

27) Saving the state of the old process and loading the saved state of the new process is called _____.

- 1 Context Switch
- 2 State
- 3 Multi programming
- 4 None of the above

Right Ans) 1

28) The term " Operating System " means _____.

- 1 A set of programs which controls computer working
- 2 The way a computer operator works
- 3 Conversion of high-level language in to machine level language
- 4 The way a floppy disk drive operates

Right Ans) 1

29) Resource locking _____.

- 1 Allows multiple tasks to simultaneously use resource
- 2 Forces only one task to use any resource at any time
- 3 Can easily cause a dead lock condition
- 4 Is not used for disk drives

Right Ans) 2

30) A thread

- 1 is a lightweight process where the context switching is low
- 2 is a lightweight process where the context swithching is high
- 3 is used to speed up paging
- 4 none of the above

Right Ans) 1