Q. 1 Choose the Best Answer

1) Identify the odd thing in the services of operating system.
a) Accounting b) Protection
c) Error detection and correction d) Dead lock handling

2) In_OS, the response time is very critical.
a) Multitasking b) Batch
c) Online d) Real-time

3) Real time systems are_.
a) Primarily used on mainframe computers b) Used for monitoring events as they occur
c) Used for program development d) Used for real time interactive users

4) When Interrupt occurs, control is immediately transferred to _____
a) Interrupt Vector b) Interrupt Request
c) Interrupt Handler d) All of the above

5) Services Provided by the Operating System:
a) Collect statistics b) Error detection
c) Grant request d) all of the above

6) Software is a program that directs the overall operation of the computer facilitates its use and interacts with the user.
a) Kernel b) Shell
c) Utilities d) All of the above

7) 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.
a) Kernel b) Shell
c) Processor d) Device Driver

8) The primary job of the operating system of a computer is to.
a) Command Resources b) Manage Resources

c) Provide Utilities d) be user friendly

9) Super computers typically employ_.

a) Real time Operating system b) Multiprocessors OS

c) Desktop OS d) None of the above

10) The operating system manages__.

a) Memory b) Processor

c) Disk and I/O devices d) All of the above

11) The Hardware mechanism that enables a device to notify the CPU is called_____.

a) Polling b) Interrupt

c) System Call d) None of the above

12) ___ OS pays more attention on the meeting of the time limits.

a) Distributed b) Network

c) Real time d) Online

13) The kernel of the operating system remains in the primary memory because_____.

a) It is mostly called (used) b) It manages all interrupt calls

c) It controls all operations in process d) It is low level

14) 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_.

a) Time Sharing b) Time out

c) Time domain d) Multitasking

15) An operating system is driven.

a) Trap. b) an instruction .

c) an interrupt. d) none of the above.

16) In Simple Batch System, programs are submitted in _____

a) groups. b) batches.

c) queues. d) all of the above.

17) _____ is a computer program because o which higher-level

computer programs can interact with a hardware device.

a) Device Driver
b) CD-ROM
c) Mother Board
d) Registers

18) The CPU is in monitor mode when the control is given to the user application.

a. True b. False

19) _____ access is used to transfer blocks of data from buffer storage directly to main memory without CPU intervention.

a) Main memory access b) cache memory access
c) Direct memory access d) virtual memory access

1) Information about a process is maintained in a_.

a) Stack b) Translation Lookaside Buffer
c) Process Control Block d) Program Control Block

2) Inter process communication can be done through__.

a) Mails b) Messages
c) System calls d) Traps

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

a) Process Number b) List of Open files
c) Memory Limits d) All of the Above

4) What is a shell?

a) It is a hardware component b) It is a command interpreter
c) It is a part in compiler d) It is a tool in CPU scheduling

5) Process State is stored in.

a) Process Control block b) Inode
c) File Allocation Table d) None of the above

6) A program at the time of executing is called_.

a) Dynamic program b) Static program
c) Binded Program d) A Process

7) It is not the layer of the Operating system.

a) Kernel
b) Shell
c) Application program
d) Critical Section

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

a) Ready
b) Blocked/Waiting
c) Idle
d) Running

9) Which is not the state of the process ?

a) Wailing
b) Running
c) Ready
d) Privileged

10) The number of processes completed per unit time is known as_____.

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

11) Switching the CPU to another Process requires to save state of the old process and loading new process state is called as_____.

a) Process Blocking
b) Context Switch
c) Time Sharing
d) None of the above

12) In Simple Batch System, programs are submitted in _____

a) groups.
b) batches.
c) queues.
d) all of the above.

For a process to change state from Running to Ready state, an interrupt must happen.

a. True
b. False

Which of the following is NOT one of system calls types?

a) File management
b) Device management
c) Information maintenance
d) user application error recovery

What is a shell?

a) It is a hardware component
b) It is a command interpreter
c) It is a part in compiler
d) It is a tool in CPU scheduling

Main function of shared memory is:

a) to use primary memory efficiently
b) to do intra process communication
c) to do inter process communication

d) none of above

When a child process is created, which of the following is a possibility in terms of the execution or address space of the child process?

a) The child process runs concurrently with the parent.
b) The child process has a new program loaded into it.
c) The child is a duplicate of the parent.
d) All of the above

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_____.

a) Terminating the process. b) Aging
c) Mutual Exclusion d) Semaphore

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

a) Using very large time slice degenerates in to first come first served algorithm
b) Using extremely small time slices improve performance
c) Using extremely small time slices degenerate in to last in first out algorithm
d) Using medium sized time slices leads to shortest request time first algorithm

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

a) CPU Utilization: Keep CPU utilization as high as possible.
b) Throughput: number of processes completed per unit time.
c) Waiting Time: Amount of time spent ready to run but not running.
d) All of the above

4) A binary semaphore

a) has the values one or zero b) is essential to binary computers
c) is used only for synchronization d) is used only for mutual exclusion

5) A process said to be in_state if it was waiting for an event that

will never occur.

a) Safe b) Unsafe
c) Starvation d) Dead lock

6) A thread is a____process.

a) Heavy Weight b) Mutliprocess
c) Inter Thread d) Light weight

7) A major problem with priority scheduling is__.

a) Definite blocking b) Starvation
c) Low priority d) none of the above

8) It is not the layer of the Operating system.

a) Kernel b) Shell
c) Application program d) Critical Section

9) Mutual exclusion

a) if one process is in a critical region others are excluded
b) prevents deadlock
c) requires semaphores to implement
d) is found only in the Windows NT operating system

10) Which scheduler controls the degree of multiprogramming?

a) Short term scheduler b) Long term scheduler
c) Middle term scheduler d) None of the above

11) 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

a) Mutual exclusion b) Hold and Wait
c) Circular Wait d) No Preemption

12) A scheduling algorithm is fair

a) if no process faces starvation b) if a process is starved, detect it and run it with high priority
c) if it uses semaphores d) only if a queue is used for scheduling

13) Semaphore can be used for solving___.

a) Wait & signal b) Deadlock
c) Synchronization d) Priority

14) Round robin scheduling is essentially the preemptive version of_____.

a) FIFO b) Shortest job first

c) Shortest remaining d) Longest time first

15) Maximize throughput, minimize response time, and accommodate as many users as possible is considered as:

a) Fairness b) Efficiency

c) Differential responsiveness d) All of the above

16) 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_____.

a) Semaphore b) Deadlock

c) Signal d) Interrupt

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

a) The statement is false b) The statement is true.

c) The statement is contradictory. d) None of the above

18) The number of processes completed per unit time is known as_____.

a) Output b) Throughput

c) Efficiency d) Capacity

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

a) Time-sharing b) Spooling

c) Preemptive scheduling d) Multiprogramming

20) FCFS scheduling is____.

a) Preemptive Scheduling b) Non-Preemptive Scheduling

c) Deadline Scheduling d) Fair share scheduling

21) __ is a high level abstraction over Semaphore.

a) Shared memory b) Message passing

c) Monitor d) Mutual exclusion

22) Terminating a process or more is used to recover from a deadlock.

a. True b. False

23) The machine on which the virtual machine is going to create is known as _____ and that virtual machine is referred as a _____

a) Guest Machine
b) Host Machine

24) Which one of the following is a kind of technique that allows sharing the single physical instance of an application or the resources among multiple organizations/customers?

a) Virtualization
b) Service-Oriented Architecture
c) Grid Computing
d) Utility Computing

25) Which one of the following statements is true about Virtualization?

a) It provides a logical name for a physical resource, and on-demand provides an indicator of that physical resource.
b) In Virtualization, we analyze the strategy related problems that customers may face.
c) In Virtualization, it is necessary to compile the Multitenant properly.
d) All of the above

26) Which of the following behaves like the monitor's entry point and reroutes the instructions of the virtual machine?

a) Dispatcher
b) Allocator
c) Interpreter
d) Both A and B

27) To avoid Hold and Wait, _____.

a) A process must be not be holding a resource, but waiting for one to be freed, and then request to acquire it
b) the system must ensure that a process that request for a resource does not hold on to another
c) A process must hold at least one resource and not be waiting to acquire additional resources
d) None of the mentioned

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