[OS C-CAT Ques Part-1](http://cdaca2z.blogspot.com/2012/12/os-complete-ques-for-c-dac.html)

1                                                                   **OS Sample Questions**

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

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 Greeedy 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 virtural 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 fragmant) 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

      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 acitvity ?   
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 alogorithm suffers from Belady's anamoly.   
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 voilates 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

    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 \_\_   
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1 has the values one or zero   
2 is essential to binary computers   
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Ans ) 1   
  
13) \_\_\_\_\_\_\_\_\_ page replacement alogorithm suffers from Belady's anamoly.   
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

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 Shorest 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

2)      **1*.Explain the concept of Reentrancy.***   
It is a useful, memory-saving technique for multiprogrammed timesharing systems. A Reentrant Procedure is one in which multiple users can share a single copy of a program during the same period. Reentrancy has 2 key aspects: The program code cannot modify itself, and the local data for each user process must be stored separately. Thus, the permanent part is the code, and the temporary part is the pointer back to the calling program and local variables used by that program. Each execution instance is called activation. It executes the code in the permanent part, but has its own copy of local variables/parameters. The temporary part associated with each activation is the activation record. Generally, the activation record is kept on the stack.   
Note: A reentrant procedure can be interrupted and called by an interrupting program, and still execute correctly on returning to the procedure.   
  
***2.Explain Belady's Anomaly.***   
Also called FIFO anomaly. Usually, on increasing the number of frames allocated to a process' virtual memory, the process execution is faster, because fewer page faults occur. Sometimes, the reverse happens, i.e., the execution time increases even when more frames are allocated to the process. This is Belady's Anomaly. This is true for certain page reference patterns.   
  
***3.What is a binary semaphore? What is its use?***   
A binary semaphore is one, which takes only 0 and 1 as values. They are used to implement mutual exclusion and synchronize concurrent processes.   
  
***4.What is thrashing?***   
It is a phenomenon in virtual memory schemes when the processor spends most of its time swapping pages, rather than executing instructions. This is due to an inordinate number of page faults.   
  
***5.List the Coffman's conditions that lead to a deadlock.***   
Mutual Exclusion: Only one process may use a critical resource at a time.   
Hold & Wait: A process may be allocated some resources while waiting for others.   
No Pre-emption: No resource can be forcible removed from a process holding it.

3)      Circular Wait: A closed chain of processes exist such that each process holds at least one resource needed by another process in the chain.

4)      ***6.What are short-, long- and medium-term scheduling?***   
Long term scheduler determines which programs are admitted to the system for processing. It controls the degree of multiprogramming. Once admitted, a job becomes a process.    
Medium term scheduling is part of the swapping function. This relates to processes that are in a blocked or suspended state. They are swapped out of real-memory until they are ready to execute. The swapping-in decision is based on memory-management criteria.   
Short term scheduler, also know as a dispatcher executes most frequently, and makes the finest-grained decision of which process should execute next. This scheduler is invoked whenever an event occurs. It may lead to interruption of one process by preemption.    
  
***7.What are turnaround time and response time?***   
Turnaround time is the interval between the submission of a job and its completion. Response time is the interval between submission of a request, and the first response to that request.   
  
***8.What are the typical elements of a process image?***   
User data: Modifiable part of user space. May include program data, user stack area, and programs that may be modified.    
User program: The instructions to be executed.   
System Stack: Each process has one or more LIFO stacks associated with it. Used to store parameters and calling addresses for procedure and system calls.   
Process control Block (PCB): Info needed by the OS to control processes.   
  
***9.What is the Translation Lookaside Buffer (TLB)?***   
In a cached system, the base addresses of the last few referenced pages is maintained in registers called the TLB that aids in faster lookup. TLB contains those page-table entries that have been most recently used. Normally, each virtual memory reference causes 2 physical memory accesses-- one to fetch appropriate page-table entry, and one to fetch the desired data. Using TLB in-between, this is reduced to just one physical memory access in cases of TLB-hit.   
  
***10.What is the resident set and working set of a process?***   
Resident set is that portion of the process image that is actually in real-memory at a particular instant. Working set is that subset of resident set that is actually needed for execution. (Relate this to the variable-window size method for swapping techniques.)   
  
***11.When is a system in safe state?***   
The set of dispatchable processes is in a safe state if there exists at least one temporal order in which all processes can be run to completion without resulting in a deadlock.   
  
***12.What is cycle stealing?***   
We encounter cycle stealing in the context of Direct Memory Access (DMA). Either the DMA controller can use the data bus when the CPU does not need it, or it may force the CPU to temporarily suspend operation. The latter technique is called cycle stealing. Note that cycle stealing can be done only at specific break points in an instruction cycle.   
  
***13.What is meant by arm-stickiness?***   
If one or a few processes have a high access rate to data on one track of a storage disk, then they may monopolize the device by repeated requests to that track. This generally happens with most common device scheduling algorithms (LIFO, SSTF, C-SCAN, etc). High-density multisurface disks are more likely to be affected by this than low density ones.   
  
***14.What are the stipulations of C2 level security?***   
C2 level security provides for:   
Discretionary Access Control   
Identification and Authentication   
Auditing   
Resource reuse   
  
***15.What is busy waiting?***   
The repeated execution of a loop of code while waiting for an event to occur is called busy-waiting. The CPU is not engaged in any real productive activity during this period, and the process does not progress toward completion.   
  
***16.Explain the popular multiprocessor thread-scheduling strategies.***   
Load Sharing: Processes are not assigned to a particular processor. A global queue of threads is maintained. Each processor, when idle, selects a thread from this queue. Note that load balancing refers to a scheme where work is allocated to processors on a more permanent basis.    
Gang Scheduling: A set of related threads is scheduled to run on a set of processors at the same time, on a 1-to-1 basis. Closely related threads / processes may be scheduled this way to reduce synchronization blocking, and minimize process switching. Group scheduling predated this strategy.   
Dedicated processor assignment: Provides implicit scheduling defined by assignment of threads to processors. For the duration of program execution, each program is allocated a set of processors equal in number to the number of threads in the program. Processors are chosen from the available pool.   
Dynamic scheduling: The number of thread in a program can be altered during the course of execution.   
  
***17.When does the condition 'rendezvous' arise?***   
In message passing, it is the condition in which, both, the sender and receiver are blocked until the message is delivered.   
  
***18.What is a trap and trapdoor?***   
Trapdoor is a secret undocumented entry point into a program used to grant access without normal methods of access authentication. A trap is a software interrupt, usually the result of an error condition.   
  
***19.What are local and global page replacements?***   
Local replacement means that an incoming page is brought in only to the relevant process' address space. Global replacement policy allows any page frame from any process to be replaced. The latter is applicable to variable partitions model only.   
  
***20.Define latency, transfer and seek time with respect to disk I/O.***   
Seek time is the time required to move the disk arm to the required track. Rotational delay or latency is the time it takes for the beginning of the required sector to reach the head. Sum of seek time (if any) and latency is the access time. Time taken to actually transfer a span of data is transfer time.    
  
***21.Describe the Buddy system of memory allocation.***   
Free memory is maintained in linked lists, each of equal sized blocks. Any such block is of size 2^k. When some memory is required by a process, the block size of next higher order is chosen, and broken into two. Note that the two such pieces differ in address only in their kth bit. Such pieces are called buddies. When any used block is freed, the OS checks to see if its buddy is also free. If so, it is rejoined, and put into the original free-block linked-list.   
  
***22.What is time-stamping?***   
It is a technique proposed by Lamport, used to order events in a distributed system without the use of clocks. This scheme is intended to order events consisting of the transmission of messages. Each system 'i' in the network maintains a counter Ci. Every time a system transmits a message, it increments its counter by 1 and attaches the time-stamp Ti to the message. When a message is received, the receiving system 'j' sets its counter Cj to 1 more than the maximum of its current value and the incoming time-stamp Ti. At each site, the ordering of messages is determined by the following rules: For messages x from site i and y from site j, x precedes y if one of the following conditions holds....(a) if Ti  
  
***23.How are the wait/signal operations for monitor different from those for semaphores?***   
If a process in a monitor signal and no task is waiting on the condition variable, the signal is lost. So this allows easier program design. Whereas in semaphores, every operation affects the value of the semaphore, so the wait and signal operations should be perfectly balanced in the program.   
  
***24.In the context of memory management, what are placement and replacement algorithms?***   
Placement algorithms determine where in available real-memory to load a program. Common methods are first-fit, next-fit, best-fit. Replacement algorithms are used when memory is full, and one process (or part of a process) needs to be swapped out to accommodate a new program. The replacement algorithm determines which are the partitions to be swapped out.   
  
***25.In loading programs into memory, what is the difference between load-time dynamic linking and run-time dynamic linking?***   
For load-time dynamic linking: Load module to be loaded is read into memory. Any reference to a target external module causes that module to be loaded and the references are updated to a relative address from the start base address of the application module.    
With run-time dynamic loading: Some of the linking is postponed until actual reference during execution. Then the correct module is loaded and linked.   
  
***26.What are demand- and pre-paging?***   
With demand paging, a page is brought into memory only when a location on that page is actually referenced during execution. With pre-paging, pages other than the one demanded by a page fault are brought in. The selection of such pages is done based on common access patterns, especially for secondary memory devices.   
  
***27.Paging a memory management function, while multiprogramming a processor management function, are the two interdependent?***   
Yes.   
  
***28.What is page cannibalizing?***   
Page swapping or page replacements are called page cannibalizing.   
  
***29.What has triggered the need for multitasking in PCs?***   
Increased speed and memory capacity of microprocessors together with the support fir virtual memory and   
Growth of client server computing   
  
***30.What are the four layers that Windows NT have in order to achieve independence?***   
Hardware abstraction layer   
Kernel   
Subsystems   
System Services.   
  
***31.What is SMP?***   
To achieve maximum efficiency and reliability a mode of operation known as symmetric multiprocessing is used. In essence, with SMP any process or threads can be assigned to any processor.   
  
***32.What are the key object oriented concepts used by Windows NT?***   
Encapsulation   
Object class and instance   
  
***33.Is Windows NT a full blown object oriented operating system? Give reasons.***   
No Windows NT is not so, because its not implemented in object oriented language and the data structures reside within one executive component and are not represented as objects and it does not support object oriented capabilities .   
  
***34.What is a drawback of MVT?***   
It does not have the features like    
ability to support multiple processors   
virtual storage   
source level debugging   
  
***35.What is process spawning?***   
When the OS at the explicit request of another process creates a process, this action is called process spawning.   
  
***36.How many jobs can be run concurrently on MVT?***   
15 jobs   
  
***37.List out some reasons for process termination.***   
Normal completion   
Time limit exceeded   
Memory unavailable   
Bounds violation   
Protection error   
Arithmetic error   
Time overrun   
I/O failure   
Invalid instruction   
Privileged instruction   
Data misuse   
Operator or OS intervention   
Parent termination.   
  
***38.What are the reasons for process suspension?***   
swapping   
interactive user request   
timing   
parent process request   
  
***39.What is process migration?***   
It is the transfer of sufficient amount of the state of process from one machine to the target machine   
  
***40.What is mutant?***   
In Windows NT a mutant provides kernel mode or user mode mutual exclusion with the notion of ownership.   
  
***41.What is an idle thread?***   
The special thread a dispatcher will execute when no ready thread is found.   
  
***42.What is FtDisk?***   
It is a fault tolerance disk driver for Windows NT.   
  
***43.What are the possible threads a thread can have?***   
Ready   
Standby   
Running    
Waiting   
Transition    
Terminated.   
  
***44.What are rings in Windows NT?***   
 Windows NT uses protection mechanism called rings provides by the process to implement separation between the user mode and kernel mode.   
  
***45.What is Executive in Windows NT?***   
In Windows NT, executive refers to the operating system code that runs in kernel mode.   
  
***46.What are the sub-components of I/O manager in Windows NT?***   
Network redirector/ Server   
Cache manager.   
File systems    
Network driver   
Device driver   
  
***47.What are DDks? Name an operating system that includes this feature.***   
 DDks are device driver kits, which are equivalent to SDKs for writing device drivers. Windows NT includes DDks.   
  
***48.What level of security does Windows NT meets?***   
 C2 level security.

**Frequently Asked Questions In Operating System Concepts**

What is MUTEX ?  
What isthe difference between a 'thread' and a 'process'?  
What is INODE?  
Explain the working of Virtual Memory.  
How does Windows NT supports Multitasking?  
Explain the Unix Kernel.  
What is Concurrency? Expain with example Deadlock and Starvation.  
What are your solution strategies for "Dining Philosophers Problem" ?  
Explain Memory Partitioning, Paging, Segmentation.  
Explain Scheduling.  
Operating System Security.  
What is Semaphore?  
Explain the following file systems : NTFS, Macintosh(HPFS), FAT .  
What are the different process states?  
What is Marshalling?  
Define and explain COM?  
What is Marshalling?  
Difference - Loading and Linking ?  
What are the basic functions of an operating system?  
Explain briefly about, processor, assembler, compiler, loader, linker and the functions executed by them.  
What are the difference phases of software development? Explain briefly?  
Differentiate between RAM and ROM?  
What is DRAM? In which form does it store data?  
What is cache memory?  
What is hard disk and what is its purpose?  
Differentiate between Complier and Interpreter?  
What are the different tasks of Lexical analysis?  
What are the different functions of Syntax phase, Sheduler?  
What are the main difference between Micro-Controller and Micro- Processor?  
Describe different job scheduling in operating systems.  
What is a Real-Time System ?  
What is the difference between Hard and Soft real-time systems ?  
What is a mission critical system ?  
What is the important aspect of a real-time system ?  
 If two processes which shares same system memory and system clock in a distributed system, What is it called?  
What is the state of the processor, when a process is waiting for some event to occur?  
What do you mean by deadlock?  
Explain the difference between microkernel and macro kernel.  
Give an example of microkernel.  
When would you choose bottom up methodology?  
When would you choose top down methodology?  
Write a small dc shell script to find number of FF in the design.  
Why paging is used ?  
Which is the best page replacement algorithm and Why? How much time is spent usually in each phases and why?  
Difference between Primary storage and secondary storage?  
What is multi tasking, multi programming, multi threading?  
Difference between multi threading and multi tasking?  
What is software life cycle?  
Demand paging, page faults, replacement algorithms, thrashing, etc.  
Explain about paged segmentation and segment paging  
While running DOS on a PC, which command would be used to duplicate the entire diskette?

**What does Belady’s Anomaly related to?**  
  
  
A. Page Replacement Algorithm  
B. Memory Management Algorithm  
C. Deadlock Prevention Algorithm  
D. Disk Scheduling Algorithm  
  
**5-2 What are the two types of Semaphore?**  
  
  
A. Digital Semaphores and Binary Semaphores  
B. Analog Semaphores and Octal Semaphores         
C. Counting Semaphores and Binary Semaphores  
D. Critical Semaphores and System Semaphores  
  
**5-3 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  
  
**5-4 Which of the following is not process states?**  
  
  
A. New  
B. Running  
C. Ready  
D. Finished  
  
**5-5 What are the requirements for the solution to critical section problem?**  
  
  
A. Mutual Exclusion  
B. Progress  
C. Bounded Waiting  
D. All of Above  
  
**5-6 Which of the following is the allocation method of a disk space?**  
  
  
A. Contiguous allocation  
B. Linked allocation  
C. Indexed allocation  
D. All of the Above  
  
**5-7 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  
  
**5-8 What do you mean by Memory Compaction?**  
  
  
A. Combine multiple equal memory holes into one big hole  
B. Combine multiple small memory holes into one big hole  
C. Divide big memory hole into small holes  
D. Divide memory hole by 2  
  
**5-9 What is Thrashing?**  
  
  
A. A high paging activity is called thrashing.  
B. A high executing activity is called thrashing  
C. A extremely long process is called thrashing  
D. A extremely long virtual memory is called thrashing  
  
**5-10 What hole will allocates in “Worst-Fit” algorithm of memory management?**  
  
  
A. It allocates the smaller hole than required memory hole  
B. It allocates the smallest hole from the available memory holes  
C. It allocates the largest hole from the available memory holes  
D. It allocates the exact same size memory hole

**Answers**

1 – A / 2 – C / 3 – A / 4 – D / 5 – D / 6 – D / 7 – D / 8 – B / 9 – A / 10 – C

**4-1 Which one of the following is not the function of Operating System?**  
  
  
A.  Resource Management  
B.  File Management  
C.  Networking  
D.  Processor Management  
  
**4-2 The Banker’s algorithm is used**  
  
  
A.  to rectify deadlock  
B.  to detect deadlock         
C.  to prevent deadlock  
D.  to slove deadlock  
  
**4-3 Which of the following concept is best to preventing page faults?**  
  
  
A.  Paging  
B.  The working set  
C.  Hit ratios  
D.  Address location resolution  
  
**4-4 Which of the following memory unit that processor can access more rapidly**  
  
  
A.  Main Memory  
B.  Virtual Memory  
C.  Cache memory  
D.  Read Only Memory  
  
**4-5 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  
  
**4-6 Bringing a page into memory only when it is needed, this mechanism is called**  
  
  
A.  Deadlock  
B.  Page Fault  
C.  Dormant Paging  
D.  Demand Paging  
  
**4-7 First-in-First-Out (FIFO) scheduling is**  
  
  
A.  Non Preemptive Scheduling  
B.  Preemptive Scheduling  
C.  Fair Share Scheduling  
D.  Deadline Scheduling  
  
**4-8 Copying a process from memory to disk to allow space for other processes is Called**  
  
  
A.  Swapping  
B.  Deadlock  
C.  Demand Paging  
D.  Page Fault  
  
**4-9. The necessary conditions needed before deadlock can occur?**  
  
  
A.  No Mutual Exclusion, Hold and wait, Preemption, Circular Wait  
B.  Mutual Exclusion, No Hold and wait, Preemption, Circular Wait  
C.  Mutual Exclusion, Hold and wait, No Preemption, Circular Wait  
D.  Mutual Exclusion, Hold and wait, Preemption, No Circular Wait  
  
**4-10 A program in execution is called**  
  
  
A.  A Paging  
B.  A Process  
C.  A virtual memory  
D.  A Demand Page

**Answers**

1 – C / 2 – C / 3 – B / 4 – C / 5 – D / 6 – D / 7 – A / 8 – A / 9 – C / 10 – B

**3-1  Which of the following file format supports in Windows 7?**  
  
  
A)  NTFS  
B)  BSD  
C)  EXT  
D)  All of the above  
  
**3-2 The Primary job of the operating system is**  
  
  
A)  Manage Commands  
B)  Manage Users         
C)  Manage Programs  
D)  Manage Resources  
  
**3-3 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  
  
**3-4 Who is called a supervisor of computer activity?**  
  
  
A)  Memory  
B)  Operating System  
C)  I/O Devices  
D)  Control Unit  
  
**3-5 Virtual Memory is**  
  
  
A)  Extremely Large Main memory  
B)  Extremely Large Secondary memory  
C)  An illusion of extremely large main memory  
D)  An illusion of extremely large secondary memory  
  
**3-6 Operating System manages**  
  
  
A)  Memory  
B)  Processor  
C)  I/O devices  
D)  All of the above  
  
**3-7 What should be the first step while OS upgrading?**  
  
  
A)  Delete old Operating System  
B)  Backup old Operating System  
C)  Backup Critical Data  
D)  Format Hard Disks  
  
**3-8 Unix Operating System is an**  
  
  
A)  Multi User Operating System  
B)  Time Sharing Operating System  
C)  Multi Tasking Operating System  
D)  All the Above  
  
**3-9 In which type of the following OS, the response time is very crucial.**  
  
  
A)  Network Operating System  
B)  Real Time Operating System  
C)  Batch Operating System  
D)  Unix Operating System  
  
**3-10 The file system “NTFS” stands for**  
  
  
A)  New Type File System  
B)  Never Terminated File System  
C)  New Technology File System  
D)  Non Terminated File System

**Answers**

1 – A / 2 – D / 3 – D / 4 – B / 5 – C / 6 – D / 7 – C / 8 – D / 9 – B / 10 – C  
**2-1. When a computer is first turned on or restarted, a special type of absolute loader called \_\_\_\_ is executed**  
A. Compile and Go loader  
B. Boot loader  
C. Bootstrap loader  
D. Relating loader  
  
**2-2. Which of the following Operating systems is better for implementing a Client-Server network**  
  
A. MS DOSB. Windows 95     
C. Windows 98  
D. Windows 2000  
  
**2-3. The operating system manages**  
  
A. MemoryB. Processes  
C. Disks and I/O devices  
D. all of the above  
  
**2-4. Usually, in MSDOS, the primary hard disk drives has the drive letter \_\_\_\_**  
  
A. AB. B  
C. C  
D. D  
  
**2-5. What is the function of an operating system?**  
  
A. Manages computer’s resources very efficientlyB. Takes care of scheduling jobs for execution  
C. Manages the flow of data and instructions  
D. All of the above  
  
**2-6. Which is not the function of the Operating System?**  
  
A. Memory managementB. Disk management  
C. Application management  
D. Virus Protection  
  
**2-7. Which Operating System doesn’t support networking between computers?**  
  
A. Windows 3.1B. Windows 95  
C. Windows 2000  
D. Windows NT  
  
**2-8. Which Operating System doesn’t support long file names?**  
  
A. OS/2B. Windows 95  
C. MS-DOS  
D. Windows NT  
  
**2-9. Which file keeps commands to execute automatically when OS is started?**  
  
A. command.comB. any batch file  
C. autoexec.bat  
D. config.sys  
  
**2-10. What should be the extension to execute files?**  
  
A. EXEB. BAT  
C. COM  
D. All of the above

**Answers**  
1 – C / 2 – D / 3 – D / 4 – C / 5 – D / 6 – D / 7 – A / 8 – C / 9 – C / 10 – D

**1-1. \_\_\_\_\_\_ is used in operating system to separate mechanism from policy**  
  
  
A. Single level implementation  
B. Two level implementation  
C. Multi level implementation  
D. None  
  
**1-2. The operating system creates \_\_\_\_\_ from the physical computer**  
  
A. Virtual spaceB. Virtual computers     
C. Virtual device  
D. None  
  
**1-3. \_\_\_\_\_\_ shares characteristics with both hardware and software**  
  
A. Operating systemB. Software  
C. Data  
D. None  
  
**1-4. Multiprogramming systems:**  
  
A. Are easier to develop than single programming systemsB. Execute each job faster  
C. Execute more jobs in the same time period  
D. Are used only one large mainframe computers.  
  
**1-5. Which is the first program run on a computer when the computer boots up?**  
  
A. System softwareB. Operating system  
C. System operations  
D. None  
  
**1-6. Which is built directly on the hardware?**  
  
A. Computer EnvironmentB. Application Software  
C. Operating System  
D. Database System  
  
**1-7. Which of the following Operating System does not implement multitasking truly?**  
  
A. Windows 98B. Windows NT  
C. Windows XP  
D. MS DOS  
  
**1-8. Which runs on computer hardware and serve as platform for other software to run on?**  
  
A. Operating SystemB. Application Software  
C. System Software  
D. All  
  
**1-9. Which is the layer of a computer system between the hardware and the user program**  
  
A. Operating environmentB. Operating system  
C. System environment  
D. None  
  
**1-10. The primary purpose of an operating system is:**  
  
A. To make the most efficient use of the computer hardwareB. To allow people to use the computer,  
C. To keep systems programmers employed  
D. To make computers easier to use

**Answers**  
1 – B / 2 – B / 3 – A / 4 – C / 5 – B / 6 – C / 7 – D / 8 – A / 9 – B / 10 – A