Operating Systems 4th Semester
Question Bank

#	Question
1	Which of the following statements are true w.r.t static memory allocation 1. static memory allocation can be performed by a compiler,linker or loader 2.Static memory allocation is possible only if size of its data structures are known before beginning of exection 3. Static memory allocation is performed only during execution of program 4.Static memory is allocated to a function or a variable before they are used for the first time
2	What is Compaction?
3	Resource-Allocation graph for Deadlock Avoidance contains _____ Edges
4	A system has 3 processes sharing 4 resources. If each process needs a maximum of 2 units then deadlock _____
5	What is the drawback of Banker's Agorithm?
6	Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____
7	Which of the following statements are true? 1. Shortest remaining time first scheduling may cause starvation 2. Preemptive scheduling may cause starvation 3. Round robin is better than FCFS in terms of response time
8	The dining – philosophers problem will occur in case of _____
9	Which of the following two operations are provided by the IPC facility?
10	Which one of the following is not true?
11	With round robin scheduling algorithm in a time shared system _____
12	What is stub?
13	There are 10 different processes running on a workstation. Idle processes are waiting for an input event in the input queue. Busy processes are scheduled with the Round-Robin time sharing method. Which out of the following quantum times is the best value for small response times, if the processes have a short runtime, e.g. less than 10ms?
14	Consider the following table of arrival time and burst time for three processes P0, P1 and P2 Process Arrival time Burst Time P0 0 ms 9 ms P1 1 ms 4 ms P2 2 ms 9 ms The pre-emptive shortest job first scheduling algorithm is used. Scheduling is carried out only at arrival or completion of processes. What is the average waiting time for the three processes?
15	Consider three processes (process id 0, 1, 2 respectively) with compute time bursts 2, 4 and 8 time units. All processes arrive at time zero. Consider the longest remaining time first (LRTF) scheduling algorithm. In LRTF ties are broken by giving priority to the process with the lowest process id. The average turn around time is:
16	A system has 12 magnetic tape drives and 3 processes : P0, P1, and P2. Process P0 requires 10 tape drives, P1 requires 4 and P2 requires 9 tape drives. Maximum needs - P0=10, P1=4, P2=9 Currently Allocated - P0=5, P1=2, P2=2 Which of the following sequence is a safe sequence?
17	Multiprogramming of Computer System Increases
18	Operating System provides the different types of services to the user. For accessing these services, the interface is provided by the
19	What is interprocess communication?
20	In the Zero capacity queue:
21	In the non blocking send :
22	Which one of the following is not shared by threads?
23	Which of the following statements are true? I. Shortest remaining time first scheduling may cause starvation II. Preemptive scheduling may cause starvation III. Round robin is better than FCFS in terms of response time
24	The time required to create a new thread in an existing process is:
25	The time required to create a new thread in an existing process is:
26	Which module gives control of the CPU to the process selected by the short-term scheduler?
27	The interval from the time of submission of a process to the time of completion is termed as:
28	Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
29	In priority scheduling algorithm:
30	An un-interruptible unit is known as :
31	Semaphore is a/an _____ to solve the critical section problem.
32	In internal fragmentation, memory is internal to a partition and :
33	A solution to the problem of external fragmentation is :
34	What is a reusable resource?
35	Which of the following condition is required for a deadlock to be possible?
36	The circular wait condition can be prevented by _____
37	Which one of the following is the deadlock avoidance algorithm?
38	A problem encountered in multitasking when a process is perpetually denied necessary resources is called _____
39	To avoid deadlock _____

40	The number of resources requested by a process _____
41	The disadvantage of a process being allocated all its resources before beginning its execution is _____
42	The data structures available in the Banker's algorithm are _____
43	The wait-for graph is a deadlock detection algorithm that is applicable when _____
44	What is the disadvantage of invoking the detection algorithm for every request?
45	A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 tape drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is?
46	A system has 3 processes sharing 4 resources. If each process needs a maximum of 2 units then, deadlock _____
47	The way of aborting processes and eliminating deadlocks is _____
48	Those processes should be aborted on occurrence of a deadlock, the termination of which?
49	For larger page tables, they are kept in main memory and a _____ points to the page table.
50	What is one of the advantages of Paging?
51	Operating System maintains the page table for
52	A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called _____
53	The segment of code in which the process may change common variables, update tables, write into files is known as _____
54	If one thread opens a file with read privileges then _____
55	Termination of the process terminates _____
56	A thread is also called _____
57	In multilevel feedback scheduling algorithm _____
58	What are the operations that can be invoked on a condition variable?
59	An I/O bound program will typically have _____
60	What is Dispatch latency?
61	What is Response time?
62	In ..... messages are not send directly from sender to receiver but rather are sent to a shared data structure consisting queues that can temporarily hold messages.
63	A ..... is a software module consisting of one or more procedures, an initialization sequence, and local data.
64	A semaphore that does not specify the order in which processes are removed from the queue is a .....
65	In distributed system, each processor has its own _____
66	Processes on the remote systems are identified by _____
67	Remote Procedure Calls are used _____
68	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 _____
69	In contiguous memory allocation _____
70	When memory is divided into several fixed sized partitions, each partition may contain _____
71	In fixed size partition, the degree of multiprogramming is bounded by _____
72	The first fit, best fit and worst fit are strategies to select a _____
73	The relocation register helps in _____
74	The real difficulty with SJF in short term scheduling is _____
75	process synchronization can be done on _____
76	A monitor is a module that encapsulates _____
77	CPU fetches the instruction from memory according to the value of _____
78	In which the access takes place when different processes try to access the same data concurrently and the outcome of the execution depends on the specific order, is called _____
79	Synchronization tool is _____
80	A semaphore is a shared integer variable that can not _____
81	The processes that are residing in main memory and are ready and waiting to execute are kept on a list called _____
82	In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of _____
83	Which algorithm is defined in Time quantum?
84	In multilevel feedback scheduling algorithm _____
85	A thread is also called _____
86	A thread shares its resources(like data section, code section, open files, signals) with _____
87	Multithreading an interactive program will increase responsiveness to the user by _____
88	Hard real time operating system has _____ jitter than a soft real time operating system.
89	In which scheduling certain amount of CPU time is allocated to each process?
90	Time duration required for scheduling dispatcher to stop one process and start another is known as