Day 3 MCQ

1	Scheduling of threads are done by A. input B. output C. operating system D. memory Ans:C
2	Multiprogramming of computer system increases A. memory B. storage C. CPU utilization D.Cost Ans:C
3	Main memory of computer system is also called A. non volatile B. volatile C. reserved D. large Ans:B
4	Secondary memory of computer system is also called A. non volatile B. volatile C. reserved D. small ANSWER: A
5	To overcome the slow operating speeds of the secondary memory we make use of faster flash drives. a) True b) False Ans:A
6	The fastest data access is provided using _____ a) Caches b) DRAM's c) SRAM's d) Registers

	Ans:D
7	The next level of memory hierarchy after the L2 cache is _____ a) Secondary storage b) TLB c) Main memory d) Register Ans:c
8	The last on the hierarchy scale of memory devices is _____ a) Main memory b) Secondary memory c) TLB d) Flash drives Ans:B
9	In the memory hierarchy, as the speed of operation increases the memory size also increases. a) True b) False Ans:B
10	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 of low priority processes may never execute, is resolved by _____. a)Terminating a procee b)aging c)mutual exclusion d)semaphore Ans:B
11	CPU performance is measured through _____. a)Throughput b)MHZ c)flaps d)none of the above Ans:A
12	Which algorithm suffers from Convoy Effect? a.FCFS b)SJF – Non preemptive c)SJF – Preemptive d.Round Robin Ans:A
13	What is the problem that arrives while using SJF algorithm? a.Deadlock b.Aging c.Starvation d.No Problem

	Ans:C
14	FCFS algorithm is implemented using a.Stack b.Tree c.Queue d.Graph Ans:C
15	'Aging' is : a.keeping track of cache contents b.keeping track of what pages are currently residing in memory c.keeping track of how many times a given page is referenced d.increasing the priority of jobs to ensure termination in a finite time Ans:D
16	Round robin scheduling falls under the category of : a) Non preemptive scheduling b) Preemptive scheduling c) All of the mentioned d) None of the mentioned Ans:B
17	With round robin scheduling algorithm in a time shared system, a) using very large time slices converts it into First come First served scheduling algorithm b) using very small time slices converts it into First come First served scheduling algorithm c) using extremely small time slices increases performance d) using very small time slices converts it into Shortest Job First algorithm Ans:A

MCQ’s on Interprocess communication and Deaadlock

1	Inter process communication : a) allows processes to communicate and synchronize their actions when using the same address space b) allows processes to communicate and synchronize their actions without using the same address space c) allows the processes to only synchronize their actions without communication d) none of the mentioned Ans:B
2	Message passing system allows processes to : a) communicate with one another without resorting to shared data b) communicate with one another by resorting to shared data c) share data d) name the recipient or sender of the message

	Ans:A
3	An IPC facility provides at least two operations : a) write & delete message b) delete & receive message c) send & delete message d) receive & send message Ans:D
4	The link between two processes P and Q to send and receive messages is called : a) communication link b) message-passing link c) synchronization link d) all of the mentioned Ans:A
5	Concurrent access to shared data may result in : a) data consistency b) data insecurity c) data inconsistency d) none of the mentioned Ans:C
6	A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access

	takes place is called : a) data consistency b) race condition c) aging d) starvation Ans:B
7	The segment of code in which the process may change common variables, update tables, write into files is known as : a) program b) critical section c) non – critical section d) synchronizing Ans:B
8	The following three conditions must be satisfied to solve the critical section problem : a) Mutual Exclusion b) Progress c) Bounded Waiting d) All of the mentioned Ans:D
9	Mutual exclusion implies that : a) if a process is executing in its critical section, then no other process must be executing in their critical sections b) if a process is executing in its critical section, then other

	processes must be executing in their critical sections c) if a process is executing in its critical section, then all the resources of the system must be blocked until it finishes execution d) none of the mentioned Ans:A
10	To enforce …….. two functions are provided enter-critical and exit-critical, where each function takes as an argument the name of the resource that is the subject of competition. A) Mutual Exclusion B) Synchronization C) Deadlock D) Starvation Ans:A
11	In ……. only one process at a time is allowed into its critical section, among all processes that have critical sections for the same resource. A) Mutual Exclusion B) Synchronization C) Deadlock D) Starvation Ans:A
12	……. when a process leaves a critical section and more than one process is waiting, the selection of a waiting

	process is arbitrary. A) Busy waiting is employed B) Starvation is possible C) Deadlock is possible D) All of the above Ans:B
13	Which of the following condition is required for deadlock to be possible? a) mutual exclusion b) a process may hold allocated resources while awaiting assignment of other resources c) no resource can be forcibly removed from a process holding it d) all of the mentioned Ans:D
14	A system is in the safe state if a) the system can allocate resources to each process in some order and still avoid a deadlock b) there exist a safe sequence c) all of the mentioned d) none of the mentioned Ans:A
15	The circular wait condition can be prevented by a) defining a linear ordering of resource types b) using thread

	c) using pipes d) all of the mentioned Ans:A
16	Which one of the following is the deadlock avoidance algorithm? a) banker's algorithm b) round-robin algorithm c) elevator algorithm d) karn's algorithm Ans:A
17	For effective operating system, when to check for deadlock? a) every time a resource request is made b) at fixed time intervals c) every time a resource request is made at fixed time intervals d) none of the mentioned Ans:C
18	Which one of the following is a visual (mathematical) way to determine the deadlock occurrence? a) resource allocation graph b) starvation graph

	c) inversion graph d) none of the mentioned Ans:A
19	To avoid deadlock a) there must be a fixed number of resources to allocate b) resource allocation must be done only once c) all deadlocked processes must be aborted d) inversion technique can be used Ans:A
20	With ……., requested resources are granted to processes whenever possible. A) deadlock detection B) deadlock deletion C) deadlock prevention D) deadlock avoidance Ans:A
21	

	Which of the following are the strategies needed for recovery once deadlock has been detected. i) Abort all deadlocked processes ii) Backup each deadlocked process to some previously defined checkpoint and restart all processes iii) Successively abort deadlocked processes until deadlock no longer exists. iv) Successively preempt resources until deadlock no longer exist. A) i, ii and iii only B) ii, iii and iv only C) i, iii and iv only D) All i, ii, iii and iv Ans:D
22	Which of the following is/are the variety of mechanisms provided by UNIX for inter-processor communication and synchronization are as follows. i) Pipes ii) Messages iii) Shared Memory iv) Main Memory v) Semaphores A) i, ii, iii and iv only B) i, ii, iii and v only C) i, iii, iv and v only D) ii, iii, iv and v only Ans:B
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	Which of the following are the mechanism used by the W2K executive to implement synchronization facilities. i) Process ii) Threads iii) Condition Variables iv) Mutex v) Semaphore A) i, ii, iii and iv only B) i, ii, iii and v only C) i, ii, iv and v only D) ii, iii, iv and v only Ans:C
24	In UNIX concurrency mechanisms, pipes and messages provide a means of communicating data across processes, whereas ……. are used to trigger actions by other processes. A) Shared memory and signals B) Semaphores and shared memory C) Semaphores and signals D) Shared memory, semaphores and signals Ans:C
25	A ……. is a circular buffer allowing two processes to communicate on the producer consumer model. A) message B) pipe C) shared memory D) signal Ans:B
26	The schema used for deadlock …….. is invoking periodically to test for deadlock. A) prevention

	B) avoidance C) detection D) deletion Ans:C
27	While preventing deadlock with …… needs no run-time computation since problem is solved in system design. A) request all resources B) preemption C) resource ordering D) finding safe path Ans:C
28	In …… some resources, such as files, may allow multiple access for readers but only exclusive access for writers. A) Mutual Exclusion B) Hold and Wait C) Preemption D) Circular Wait Ans:A
29	For a deadlock to arise, which of the following conditions must hold simultaneously ? a) Mutual exclusion b) No preemption c) Hold and wait d) All of the mentioned

	Ans:D
30	Deadlock prevention is a set of methods : a) to ensure that at least one of the necessary conditions cannot hold b) to ensure that all of the necessary conditions do not hold c) to decide if the requested resources for a process have to be given or not d) to recover from a deadlock Ans:A