**Studytonight – OS test 13 – Aditya Jain**

**(mostly based on Process Synchronization)**

1. **Which of the following does not interrupt a running process ?**a) A device  
   b) Timer  
   c) **Scheduler process**d) Power failure
2. **Which of the following need not necessarily be saved on a context switch between processes ?**a) General purpose registers  
   **b) Translation look-aside buffer**c) Program counter  
   d) All of the mentioned
3. **The context of a process in the PCB of a process does not contain :**a) the value of the CPU registers  
   b) the process state  
   c) memory-management information  
   d) **context switch time**
4. **Which process can be affected by other processes executing in the system?  
   a) cooperating process**b) child process  
   c) parent process  
   d) init process
5. **When several processes access the same data concurrently and the outcome of the execution depends on the particular order in which the access takes place, is called**  
   a) dynamic condition  
   **b) race condition**c) essential condition  
   d) critical condition
6. **If a process is executing in its critical section, then no other processes can be executing in their critical section. This condition is called  
   a) mutual exclusion**b) critical exclusion  
   c) synchronous exclusion  
   d) asynchronous exclusion
7. **Which one of the following is a synchronization tool?**a) thread  
   b) pipe  
   **c) semaphore**d) socket
8. **A semaphore is a shared integer variable  
   a) that cannot drop below zero**b) that cannot be more than zero  
   c) that cannot drop below one  
   d) that cannot be more than one
9. **Mutual exclusion can be provided by the**a) mutex locks  
   b) binary semaphores  
   **c) both mutex locks and binary semaphores**d) none of the mentioned
10. **To enable a process to wait within the monitor,  
    a) a condition variable must be declared as condition**b) condition variables must be used as boolean objects  
    c) semaphore must be used  
    d) all of the mentioned
11. **A monitor is a module that encapsulates**a) shared data structures  
    b) procedures that operate on shared data structure  
    c) synchronization between concurrent procedure invocation  
    **d) all of the mentioned**
12. **Process synchronization can be done on**a) hardware level  
    b) software level  
    **c) both hardware and software level**d) none of the mentioned
13. **When high priority task is indirectly preempted by medium priority task effectively inverting the relative priority of the two tasks, the scenario is called  
    a) priority inversion**b) priority removal  
    c) priority exchange  
    d) priority modification
14. **Restricting the child process to a subset of the parent’s resources prevents any process from :**a) overloading the system by using a lot of secondary storage  
    b) under-loading the system by very less CPU utilization  
    **c) overloading the system by creating a lot of sub-processes**d) crashing the system by utilizing multiple resources
15. **A parent process calling \_\_\_\_\_\_ system call will be suspended until children processes terminate.  
    a) wait**b) fork  
    c) exit  
    d) exec