Question-1: The systems which allow only one process execution at a time are called:
  a) Uniprogramming systems
  b) Uniprocessing systems
  c) Unitasking systems
  d) None of the above

Question-2: In operating system, each process has its own:
  a) Address space and global variables
  b) Open files
  c) Pending alarms, signals and signal handlers
  d) All of the above

Question-3: In UNIX, Which system call creates the new process?
  a) fork
  b) create
  c) new
  d) None of the above

Question-4: A process can be terminated due to:
  a) Normal exit
  b) Fatal error
  c) Killed by another process
  d) All of the above

Question-5: What is the ready state of a process?
  a) When process is scheduled to run after some execution
  b) When process is unable to run until some task has been completed
  c) When process is using the CPU
  d) None of the above

Question-6: What is interprocess communication?
  a) Communication within the processes
  b) Communication between two processes
  c) Communication between two threads of same process
  d) None of the mentioned

Question-7: A set of processes is deadlock if:
  a) Each process is blocked and will remain so forever
  b) Each process is terminated
  c) All processes are trying to kill each other
  d) None of the above

Question-8: A process stack does not contain:
  a) Function Parameters
  b) Local Variables
  c) Return Addresses
  d) PID of child process

Question-9: Which system call returns the process identifier of a terminated child?
  a) wait
  b) exit

c) fork
d) get

Question-10: The address of the next instruction to be executed by the current process is provided by the:
a) CPU Registers
b) Program Counter
c) Process Stack
d) Pipe

Question-11: A Process Control Block (PCB) does not contain which of the following:
a) Code
b) Process State
c) I/O Status Information
d) Bootstrap Program

Question-12: The number of processes completed per unit time is known as _____
a) Output
b) Throughput
c) Efficiency
d) Capacity

Question-13: The state of a process is defined by:
a) The final activity of the process
b) The activity just executed by the process
c) The activity to next be executed by the process
d) The current activity of the process

Question-14: Which of the following is not the state of a process?
a) New
b) Old
c) Waiting
d) Running

Question-15: The Process Control Block is:
a) Process type variable
b) Data Structure
c) A secondary storage section
d) A Block in memory

Question-16: The entry of all the PCBs of the current processes is in:
a) Process Register
b) Program Counter
c) Process Table
d) Process Unit

Question-17: The degree of multi-programming is:
a) The number of processes executed per unit time
b) The number of processes in the ready queue
c) The number of processes in the I/O queue
d) The number of processes in memory

Question-18: A single thread of control allows the process to perform:
   a) Only one task at a time
   b) Multiple tasks at a time
   c) All of the above
   d) None of the above

Question-19: Which of the following do not belong to queues for processes?
   a) Job Queue
   b) PCB Queue
   c) Device Queue
   d) Ready Queue

Question-20: When the process issues an I/O request:
   a) It is placed in an I/O queue
   b) It is placed in a waiting queue
   c) It is placed in the ready queue
   d) It is placed in the Job queue

Question-21: What is a long-term scheduler?
   a) It selects which process has to be brought into the ready queue
   b) It selects which process has to be executed next and allocates CPU
   c) It selects which process to remove from memory by swapping
   d) None of the above

Question-22: If all processes I/O bound, the ready queue will almost always be _____, and the Short term Scheduler will have a _____ to do.
   a) full, little
   b) full, lot
   c) empty, little
   d) empty, lot

Question-23: What is a medium-term scheduler?
   a) It selects which process has to be brought into the ready queue
   b) It selects which process has to be executed next and allocates CPU
   c) It selects which process to remove from memory by swapping
   d) None of the above

Question-24: What is a short-term scheduler?
   a) It selects which process has to be brought into the ready queue
   b) It selects which process has to be executed next and allocates CPU
   c) It selects which process to remove from memory by swapping
   d) None of the above

Question-25: The primary distinction between the short term scheduler and the long term scheduler is:
   a) The length of their queues
   b) The type of processes they schedule
   c) The frequency of their execution
   d) None of the above

Question-26: The only state transition that is initiated by the user process itself is:
   a) block
   b) wakeup
   c) dispatch
   d) None of the above

Question-27: In a time-sharing operating system, when the time slot given to a process is completed, the process goes from the running state to the_____.
   a) Blocked State
   b) Ready State
   c) Suspended State
   d) Terminated State

Question-28: In a multi-programming environment:
   a) The processor executes more than one process at a time
   b) The programs are developed by more than one person
   c) More than one process resides in the memory
   d) A single user can execute many programs at the same time

Question-29: Suppose that a process is in "Blocked" state waiting for some I/O service. When the service is completed, it goes to the:
   a) Running State
   b) Ready State
   c) Suspended State
   d) Terminated State

Question-30: 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

Question-31: Which of the following does not interrupt a running process?
   a) A Device
   b) Timer
   c) Scheduler Process
   d) Power Failure

Question-32: Several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which the access takes place, is called a (n) ____.
   a) Shared Memory Segments
   b) Entry Section
   c) Race Condition
   d) Process Synchronization

Question-33: Which of the following state transitions is not possible?
   a) Blocked to Running
   b) Ready to Running
   c) Blocked to Ready
   d) Running to Blocked

Question-34: Which of the following is not a characteristic of virus?
a) Virus destroy and modify user data
b) Virus is a standalone program
c) Virus is a code embedded in a legitimate program
d) Virus cannot be detected.

Question-35: Semaphore is a/an _____ to solve the critical section problem.
a) Hardware for a system
b) Special program for a system
c) Integer variable
d) None of the above

Question-36: Spinlocks are:
a) CPU cycles wasting locks over critical sections of programs
b) Locks that avoid time wastage in context switches
c) Locks that work better on multiprocessor systems
d) All of the above

Question-37: The main disadvantage of spinlocks is that:
a) They are not sufficient for many process
b) They require busy waiting
c) They are unreliable sometimes
d) They are too complex for programmers

Question-38: The wait operation of the semaphore basically works on the basic _____ system call.
a) stop()
b) block()
c) hold()
d) wait()

Question-39: If the semaphore value is negative:
a) Its magnitude is the number of processes waiting on that semaphore
b) It is invalid
c) No operation can be further performed on it until the signal operation is performed on it
d) None of the above

Question-40: The code that changes the value of the semaphore is:
a) Remainder section code
b) Non – critical section code
c) Critical section code
d) None of the above