**OPERATING SYSTEM MCQ**

1. The unit of dispatching is usually referred to as a  
…………..

A) Thread

B) Lightweight process

C) Process

D) Both A and B

**Answer: D**

2. ……………….. is a example of an operating system that support  
single user process and single thread.

A) UNIX

B) MS-DOS

C) OS/2

D) Windows 2000

**Answer: B**

3. State true or false.

i) Unix, support multiple user process but only support one  
thread per process.

ii) A java run time environment is an example of a system of  
one process with multiple threads.

A) True, False

B) True, True

C) False, True

D) False, False

**Answer: A**

4. …………… are very effective because a mode switch is not  
required to switch from one thread to another.

A) Kernel-level threads

B) User-level threads

C) Alterable threads

D) Application level threads

**Answer: B**

5. …………… is a condition in which there is a set of  
concurrent processes, only one of which is able to access a given resource or  
perform a given function at any time.

A) Mutual Exclusion

B) Busy Waiting

C) Deadlock

D) Starvation

**Answer: A**

6. …………………. Techniques can be used to resolve  conflicts, such as competition for resources,  
and to synchronize processes so that they can cooperate.

A) Mutual Exclusion

B) Busy Waiting

C) Deadlock

D) Starvation

**Answer: A**

7. ……………. Can be defined as the permanent blocking of a set  
of processed that either complete for system resources or communicate with each  
other.

A) Deadlock

B) Permanent lock

C) Starvation

D) Mutual exclusion

**Answer: A**

8. The following conditions of policy must be present for a  
deadlock to be possible.

i) Mutual exclusion                                          ii)  
Hold and wait

iii) No preemption                                           iv)  
Circular wait

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

**Answer: D**

9. A direct method of deadlock prevention is to prevent the  
occurrence of …………..

A) Mutual exclusion

B) Hold and wait

C) Circular waits

D) No preemption

**Answer: C**

10. State true of  
false.

i) With paging, each process is divided into relatively  
small, fixed-size pages.

ii) Segmentation provides for the use of pieces of varying  
size.

A) True, False

B) True, True

C) False, True

D) False, False

**Answer: B**

11. ………….. refers to a situation in which a process is ready to execute but is continuously denied access to a processor in deference to other processes.

A) Synchronization

B) Mutual Exclusion

C) Dead lock

D) Starvation

**Answer: D**

12. Which of the following is not the approach to dealing with deadlock?

A) Prevention

B) Avoidance

C) Detection

D) Deletion

**Answer: D**

13. Which of the following are the states of a five state process model?

i) Running            ii) Ready               iii) New                 iv) Exit                   v) Destroy

A) i, ii, iii and v only

B) i, ii, iv and v only

C) i, ii, iii, and iv only

D) All i, ii, iii, iv and v

**Answer: C**

14. State which statement is true for Suspended process?

i) The process is not immediately available for execution.

ii) The process may be removed from suspended state automatically without removal order.

A) i only

B) ii only

C) i and ii only

D) None

**Answer: A**

15. Following is/are the reasons for process suspension.

A) Swapping parent process

B) Inter request

C) Timing

D) All of the above

**Answer: D**

16. The different types of tables maintained by the operating system are ………….

A) memory, logical , I/O file

B) memory, I/O, file, physical

C) memory, I/O, file, process

D) memory, logical, I/O, physical

**Answer: C**

17. Which of the following information not included in memory table?

A) The allocation of main memory to process.

B) The allocation of secondary memory to process

C) Any information needed to manage virtual memory

D) Any information about the existence of file

**Answer: D**

18. Process Management function of an operating system kernel includes.

A) Process creation and termination.

B) Process scheduling and dispatching

C) Process switching

D) All of the above

**Answer: D**

19. The typical elements of process image are …………………

i) User data         ii) System Data                  iii) User program              iv) System stack

A) i, iii and iv only

B) i, ii,  and iv only

C) ii, iii, and iv only

D) All i, ii, iii, and iv

**Answer: A**

20. Match the following mechanisms for interrupting the execution of a process and their uses.

i) Interrupt                                                                         a) Call to an operating system function

ii) Trap                                                                              b) Reaction to an asynchronous external event

iii) Supervisor Call                                                             c) Handling of a error or an exception condition

A) i-a, ii-b, iii-c

B) i-c, ii-a, iii-b

C) i-b, ii-c, iii-a

D) i-a, ii-c, iii-b

**Answer: C**

21. Which of the following is not the function of Micro kernel?

A) File management

B) Low-level memory management

C) Inter-process communication

D) I/O interrupts management

**Answer: A**

22. Match the following.

i) Mutual exclusion                          a) A process may hold allocated resources while waiting assignment.

ii) Hold and wait                             b) No resource can be forcibly removed from a process holding it.

iii) No preemption                           c) Only one process may use a resource at a time.

A) i-a, ii-b, iii-c

B) i-a, ii-c, iii-b

C) i-b, ii-c, iii-a

D) i-c, ii-a, iii-b

**Answer: D**

23. A direct method of deadlock prevention is to prevent the occurrences of ……………….

A) Mutual exclusion

B) Hold and wait

C) Circular waits

D) No preemption

**Answer: C**

24. The methods or algorithms which are used to increase the performance of disk storage sub-system is called ………….

A) Disk performing

B) Disk scheduling

C) Disk storing

D) Disk extending

**Answer: B**

25. …………….. is the time required to move the disk arm to the required track.

A) Seek time

B) Rotational delay

C) Latency time

D) Access time

**Answer: A**

26. The …………… policy restricts scanning to one direction only.

A) SCAN

B) C-SCAN

C) N-Step SCAN

D) Both A and B

**Answer: B**

27. …………… policy selects the disk I/O request that requires the least movement of the disk arm from its current position.

A) FSCAN

B) SSTF

C) SCAN

D) C-SCAN

**Answer: B**

28. ……………… refers to the ability of an operating system to support multiple threads of execution with a single process.

A) Multithreading

B) Multiprocessing

C) Multiexecuting

D) Bi-threading

**Answer: A**

29. State whether the following statement is true.

i) It takes less time to terminate a thread than a process.

ii) Threads enhance efficiency in communication between different executing programs.

A) i-True, ii-False

B) i-True, ii-True

C) i-False, ii-True

D) i-False, ii-False

**Answer: B**

30. ………… is a special type of programming language used to provide instructions to the monitor simple batch processing schema.

A) Job control language (JCL)

B) Processing control language (PCL)

C) Batch control language (BCL)

D) Monitor control language (MCL)

**Answer: A**

31. ………….. refers to a situation in which a process is ready to execute but is continuously denied access to a processor in deference to other processes.

A) Synchronization

B) Mutual Exclusion

C) Dead lock

D) Starvation

**Answer: D**

32. Which of the following is not the approach to dealing with deadlock?

A) Prevention

B) Avoidance

C) Detection

D) Deletion

**Answer: D**

33. Which of the following are the states of a five state process model?

i) Running            ii) Ready               iii) New                 iv) Exit                   v) Destroy

A) i, ii, iii and v only

B) i, ii, iv and v only

C) i, ii, iii, and iv only

D) All i, ii, iii, iv and v

**Answer: C**

34. State which statement is true for Suspended process?

i) The process is not immediately available for execution.

ii) The process may be removed from suspended state automatically without removal order.

A) i only

B) ii only

C) i and ii only

D) None

**Answer: A**

35. Following is/are the reasons for process suspension.

A) Swapping parent process

B) Inter request

C) Timing

D) All of the above

**Answer: D**

36. The different types of tables maintained by the operating system are ………….

A) memory, logical , I/O file

B) memory, I/O, file, physical

C) memory, I/O, file, process

D) memory, logical, I/O, physical

**Answer: C**

37. Which of the following information not included in memory table?

A) The allocation of main memory to process.

B) The allocation of secondary memory to process

C) Any information needed to manage virtual memory

D) Any information about the existence of file

**Answer: D**

38. Process Management function of an operating system kernel includes.

A) Process creation and termination.

B) Process scheduling and dispatching

C) Process switching

D) All of the above

**Answer: D**

39. The typical elements of process image are …………………

i) User data         ii) System Data                  iii) User program              iv) System stack

A) i, iii and iv only

B) i, ii,  and iv only

C) ii, iii, and iv only

D) All i, ii, iii, and iv

**Answer: A**

40. Match the following mechanisms for interrupting the execution of a process and their uses.

i) Interrupt                                                                         a) Call to an operating system function

ii) Trap                                                                              b) Reaction to an asynchronous external event

iii) Supervisor Call                                                             c) Handling of a error or an exception condition

A) i-a, ii-b, iii-c

B) i-c, ii-a, iii-b

C) i-b, ii-c, iii-a

D) i-a, ii-c, iii-b

**Answer: C**

51. …………. Involves treating main memory as a resource to be  
allocated to and shared among a number of active processes.

A) Partition management

B) Memory management

C) Disk management

D) All of the above

**Answer: B**

52. A process that execute only in main memory is referred to  
as ……………… and that allocated in disk is referred to a …………….

A) virtual memory, true memory

B) virtual memory, real memory

C) real memory, virtual memory

D) imaginary memory, real memory

**Answer: C**

53. In process scheduling, …………………… determines when new  
processes are admitted to the system.

A) long term scheduling

B) medium term scheduling

C) short term scheduling

D) none of the above

**Answer: A**

54. In process scheduling, ………………… determines which ready  
process will be executed next by processor.

A) long term scheduling

B) medium term scheduling

C) short term scheduling

D) none of the above

**Answer: C**

55. The sum of the seek time, and the rotational delay is  
called the ………………..

A) reached time

B) access time

C) arrived time

D) common time

**Answer: B**

56. The …………….. policy segments the disks request queue into  
sub queues of the length N.

A) SCAN

B) C-SCAN

C) N-Step SCAN

D) FSCAN

**Answer: C**

57. Which of the  
following are the functions of operating system?

i) recovering from errors                              ii)  
facilitating input/output

iii) facilitating parallel operation                 iv) sharing hardware among users

v) implementing user interface

A) i, ii, ii, and v only

B) i, ii, iii, and iv only

C) ii, iii, iv and v only

D) All i, ii, iii, iv and v

**Answer: D**

58. File management function of the operating system includes

i) File creation and deletion                         ii) Disk scheduling

iii) Directory creation                                      iv)  
Mapping file in secondary storage.

A) i, ii and iii only

B) i, iii and iv only

C) ii, iii and iv only

D) All i, ii, iii and iv

**Answer: B**

59. The ……………. Determines when a page should be brought into  
main memory.

A) Fetch policy

B) Placement policy

C) Replacement policy

D) Resident set management

**Answer: A**

60. With …………………. A page is written out to secondary memory  
only when it has been selected for replacement.

A) pre-cleaning

B) demand cleaning

C) required cleaning

D) fast cleaning

**Answer: B**

61) The process is ……..

A. an instance of a program in execution

B. a program only

C. a processor state

D. the kernel state

**Answer: A**

62) The mechanism that brings a page into memory only when it is needed is called …..

A. segmentation

B. fragmentation

C. demand paging

D. page replacement

**Answer: C**

63) The two paradigms if IPC are ………… and …….

A. call, reply

B. shared memory, message passing

C. send, receive

D. call by value, call by reference

**Answer: B**

64) A program is passive while a process is ……….

A. inactive

B. spontaneous

C. active

D. impulse

**Answer: C**

65) FIFO scheduling is ……….

A. preemptive scheduling

B. non preemptive scheduling

C. deadline scheduling

D. fair share scheduling

**Answer: B**

66) ……… ensures that once transaction completes successively, the results of the operations become permanent.

A. serializability

B. synchronizability

C. atomicity

D. durability

**Answer: D**

67) A process is created and is initially put in the ……..

A. ready queue

B. device queue

C. i/o queue

D. waiting queue

**Answer: A**

68) Which directory implementation is used in most of the Operating System?

A. single level directory structure

B. two level directory structure

C. tree directory structure

D. acyclic directory structure

**Answer: C**

69) Isolation property is also know as ………

A. Performance

B. Serializability

C. Durability

D. Atomicity

**Answer: B**

70) A thread is a ……….

A. task

B. process

C. program

D. light weight process

**Answer: D**

71) The interval from the fine submission of a process to the time of completion is the ……

A. waiting time

B. blocked time

C. turnaround time

D. response time

**Answer:C**

72) The term “Operating System” means ……….

A. a set of programs which controls computer working

B. the way a computer operator works

C. conversion of high-level language in to machine level language

D. the way a floppy disk drive operates

**Answer: A**

73) Generally we have user level threads and ………..

A. Programmer level thread

B. kernel level thread

C. program level thread

D. process level thread

**Answer: B**

74) To ensure that the ……… condition never occurs in the system, we must guarantee that, whenever a process requests a resource, it does not have any other resource.

A. mutual exclusion

B. no-preemption

C. circular waits

D. hold and wait

**Answer: D**

75) Resource locking ……..

A. allows multiple tasks to simultaneously use resource

B. forces only on task to use any resource at any time

C. can easily cause a dead lock condition

D. in not used for disk drives

**Answer: B**

76) A program responsible for assigning the CPU to the process that has been selected by the short term scheduler is known as ………

A. scheduler

B. dispatcher

C. debugger

D. compiler

**Answer: B**

77) The ………. instruct Kernel to do various operations of the calling program and exchange data between the Kernel at the program.

A. shell

B. editors

C. system calls

D. commands

**Answer: C**

78) Which of the following buffering strategies are used in interprocess communication?

A. null pointer

B. single message buffer

C. multiple message buffer

D. all of the above

**Answer: D**

79) The process of splitting of data into equal size partitions over multiple disks is known as …..

A. data stripping

B. array of disks

C. RAID

D. SCAN

**Answer: A**

80) Pipes allow transfer of data between processor in a ………. manner.

A. last in first out

B. shortest job first

C. multilevel queue

D. first in first out

**Answer: D**