

Dr. Rafiq Zakaria Campus

Maulana Azad College of Arts, Science & Commerce, Aurangabad

Department of Computer Science

Academic Year 2015-16

MCQs on Operating System

Sem.-II

1. What is operating system?

- a) collection of programs that manages hardware resources
- b) system service provider to the application programs
- c) link to interface the hardware and application programs
- d) all of the mentioned

Answer:d

2. To access the services of operating system, the interface is provided by the

- a) system calls
- b) API
- c) library
- d) assembly instructions

Answer:d

3. Which one of the following error will be handle by the operating system?

- a) power failure
- b) lack of paper in printer
- c) connection failure in the network
- d) all of the mentioned

Answer:d

4. The main function of the command interpreter is

- a) to get and execute the next user-specified command
- b) to provide the interface between the API and application program
- c) to handle the files in operating system
- d) none of the mentioned

Answer:a

5. By operating system, the resource management can be done via

- a) time division multiplexing
- b) space division multiplexing
- c) both (a) and (b)
- d) none of the mentioned

Answer:c

6. If a process fails, most operating system write the error information to a

- a) log file
 - b) another running process
 - c) new file
 - d) none of the mentioned
- Answer:a

7. The systems which allows only one process execution at a time, are called

- a) uniprogramming systems
 - b) uniprocessing systems
 - c) unitasking systems
 - d) none of the mentioned
- Answer:a

8. 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 mentioned
- Answer:d

9. A process can be terminated due to

- a) normal exit
 - b) fatal error
 - c) killed by another process
 - d) all of the mentioned
- Answer:d

10. 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 mentioned
- Answer:a

11. What is interprocess communication?

- a) communication within the process
 - b) communication between two process
 - c) communication between two threads of same process
 - d) none of the mentioned
- Answer:b

12. 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 mentioned

Answer:a

13. A process stack does not contain

- a) function parameters
- b) local variables
- c) return addresses
- d) PID of child process

Answer:d

14. Which system call returns the process identifier of a terminated child?

- a) wait
- b) exit
- c) fork
- d) get

Answer:a

15. 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

Answer:b

16. 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

Answer: a

17. 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 these

Answer: a

18. 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 these

Answer: c

19. 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 these

Answer: b

20. 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 these

Answer: c

21. 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

Answer: b

22. 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

Answer: c

23. 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

Answer: b

24. Which of the following does not interrupt a running process ?

- a) A device
- b) Timer
- c) Scheduler process
- d) Power failure

Answer: c

25. 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

Answer: c

26. 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

Answer: a

27. Which process can affect or be affected by other processes executing in the system?

- a) cooperating process
- b) child process
- c) parent process
- d) init process

Answer: a

28. 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

Answer: a

29. Which one of the following is a synchronization tool?

- a) thread
- b) pipe
- c) semaphore
- d) socket

Answer: c

30. A semaphore is a shared integer variable

- a) that can not drop below zero
- b) that can not be more than zero
- c) that can not drop below one
- d) that can not be more than one

Answer:a

31. Process synchronization can be done on

- a) hardware level
- b) software level
- c) both (a) and (b)
- d) none of the mentioned

Answer:c

32. 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

Answer:d

33. What is the reusable resource?

- a) that can be used by one process at a time and is not depleted by that use
- b) that can be used by more than one process at a time
- c) that can be shared between various threads
- d) none of the mentioned

Answer:a

34. 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

Answer:d

35. 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

Answer:a

36. For effective operating system, when to check for deadlock?

- a) every time a resource request is made
- b) at fixed time intervals
- c) both (a) and (b)
- d) none of the mentioned

Answer:c

37. 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

Answer:a

38. An un-interruptible unit is known as :

- a) single
- b) atomic
- c) static
- d) None of these

Answer: b

39. 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 these

Answer: c

40. CPU fetches the instruction from memory according to the value of

- a) program counter
- b) status register
- c) instruction register
- d) program status word

Answer:a

41. A memory buffer used to accommodate a speed differential is called

- a) stack pointer
- b) cache
- c) accumulator
- d) disk buffer

Answer:b

42. Which one of the following is the address generated by CPU?

- a) physical address
- b) absolute address
- c) logical address
- d) none of the mentioned

Answer:c

43. Run time mapping from virtual to physical address is done by

- a) memory management unit
- b) CPU
- c) PCI
- d) none of the mentioned

Answer:a

44. Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called

- a) fragmentation
- b) paging
- c) mapping
- d) none of the mentioned

Answer:b

45. Program always deals with

- a) logical address
- b) absolute address
- c) physical address
- d) relative address

Answer:a

46. Operating System maintains the page table for

- a) each process
- b) each thread
- c) each instruction
- d) each address

Answer:a

47. Because of virtual memory, the memory can be shared among

- a) processes
- b) threads
- c) instructions
- d) none of the mentioned

Answer:a

48. _____ is the concept in which a process is copied into main memory from the secondary memory according to the requirement.

- a) Paging
 - b) Demand paging
 - c) Segmentation
 - d) Swapping
- Answer:b

49. The pager concerns with the

- a) individual page of a process
 - b) entire process
 - c) entire thread
 - d) first page of a process
- Answer:a

50. Swap space exists in

- a) primary memory
 - b) secondary memory
 - c) CPU
 - d) none of the mentioned
- Answer:b

51. In FIFO page replacement algorithm, when a page must be replaced

- a) oldest page is chosen
 - b) newest page is chosen
 - c) random page is chosen
 - d) none of the mentioned
- Answer:a

52. _____ is a unique tag, usually a number, identifies the file within the file system.

- a) File identifier
 - b) File name
 - c) File type
 - d) none of the mentioned
- Answer:a

53. To create a file

- a) allocate the space in file system
 - b) make an entry for new file in directory
 - c) both (a) and (b)
 - d) none of the mentioned
- Answer:c

54. By using the specific system call, we can

- a) open the file
 - b) read the file
 - c) write into the file
 - d) all of the mentioned
- Answer:d

55. File type can be represented by

- a) file name
- b) file extension
- c) file identifier
- d) none of the mentioned

Answer:b

56. Mapping of file is managed by

- a) file metadata
- b) page table
- c) virtual memory
- d) file system

Answer:a

57. file system fragmentation occurs when

- a) unused space or single file are not contiguous
- b) used space is not contiguous
- c) unused space is non-contiguous
- d) multiple files are non-contiguous

Answer:a

58. If one or more devices use a common set of wires to communicate with the computer system, the connection is called _____.

- a) CPU
- b) Monitor
- c) wirefull
- d) bus

Answer : d

59. A _____ is a collection of electronics that can operate a port, a bus, or a device.

- a) controller
- b) driver
- c) host
- d) bus

Answer : a

60. An I/O port typically consists of four registers status, control, _____ and _____ registers.

- a) system in, system out
- b) data in, data out
- c) flow in, flow out
- d) input, output

Answer : b

61. The _____ register is read by the host to get input.

- a) flow in
 - b) flow out
 - c) data in
 - d) data out
- Answer : c

62. The _____ register is written by the host to send output.

- a) status
 - b) control
 - c) data in
 - d) data out
- Answer : d

63. The hardware mechanism that allows a device to notify the CPU is called _____.

- a) polling
 - b) interrupt
 - c) driver
 - d) controlling
- Answer : b