

1/1/2021

Operating System

1. Which of the following is not an operating system?

- a. **Oracle**
- b. Linux
- c. Windows
- d. DOS

2. What is the maximum length of the filename in DOS?

- a. 5
- b. **8**
- c. 12
- d. 15

3. Command interpreter is also called the shell?

- a. **True**
- b. False

4. When was the first operating system developed?

- a. 1948
- b. 1947
- c. 1951
- d. **1950**

5. When were MS windows operating systems proposed?

- a. **1985**
- b. 1992
- c. 1994
- d. 1990

6. What is the full name of FAT?

- a. Format Allocation Table
- b. Font Attribute Table
- c. File Attribute Table
- d. **File Allocation Table**

7. BIOS is used?

- a. **By operating system**
- b. By application software
- c. By Interpreter
- d. By compiler

8. BIOS is used to configure and identify the hardware in a system such as the hard drive, floppy drive, optical drive, CPU, and memory.

- a. May be
- b. Not exactly
- c. False
- d. **True**

9. What is the mean of the Booting in the operating system?

- a. Install the program
- b. **Restarting computer**
- c. Turn off
- d. To scan

10. Banker's algorithm is used?

- a. To occur deadlock
- b. To solve deadlock
- c. To deadlock recovery
- d. **To prevent deadlock**

11. When you delete a file in your computer, where does it go?

- a. Task bar
- b. Hard disk
- c. Both a and b
- d. **Recycle bin**

12. Which of the following is the extension of Notepad?

- a. .doc
- b. .pdf
- c. **.txt**
- d. .xls

13. Which is the Linux operating system?

- a. Windows OS
- b. **Open source OS**
- c. Private OS
- d. None

14. What is an operating system?

- a. collection of programs that manages hardware resources
- b. interface between the hardware and application programs
- c. **Both A and B**
- d. None of the above

15. The FAT is a file system architecture. A FAT of the contents of a computer disk indicates which field is used for which file.

- a. False
- b. **True**

16. Which one of the following is not true?

- a. kernel is the program that constitutes the central core of the operating system
- b. kernel is made of various modules which can not be loaded in running operating system**
- c. kernel is the first part of operating system to load into memory during booting
- d. kernel remains in the memory during the entire computer session

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

- a. Lack of paper in printer
- b. Connection failure In network
- c. Power failure
- d. All of above**

18. The OS X has _____

- a. Hybrid kernel**
- b. Monolithic kernel
- c. micro kernel
- d. microlithic kernel

19. Which one of the following is not a real time operating system?

- a. RTLinux
- b. QNX
- c. Palm OS**
- d. VxWorks

20. Which facility dynamically adds probes to a running system, both in user processes and in the kernel?

- a. DAdd
- b. DMap
- c. DTrace**
- d. DLocate

21. The Linux operating system is an open-source operating system made up of a kernel. It is a very safe operating system.

- a. **True**
- b. False

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

- a. **Log file**
- b. New file
- c. Existing file
- d. None of Above

23. In Operating Systems, which of the following is/are CPU scheduling algorithms?

- a. Priority
- b. Round Robin algorithm
- c. **both a and b**
- d. None of Above

24. What is the full name of the DSM?

- a. **Distributed Shared Memory**
- b. Direct Shared Memory
- c. Direct System Module
- d. Direct System Memory

25. What is the full name of the IDL?

- a. **Interface Definition Language**
- b. Interface Direct Language
- c. Interface Data Language
- d. None

26. What is bootstrapping called?

- a. Cold boot**
- b. Hot boot
- c. Cold hot bot
- d. All of Above

27. What is the fence register used for?

- a. To disk protection
- b. To CPU protection
- c. To memory protection**
- d. None of Above

28. The system software is a type of computer program designed to run hardware and software programs on a computer. According to some definitions, system software also includes system utilities, system restore, development tools, compilers, and debuggers.

- a. True**
- b. False

29. MS-DOS operating system uses the file system that supports the 8.3 characters. The eight characters are used to the filename, and three characters are used to the extension.

- a. True**
- b. False

30. Windows 98 was first window to introduced the My Computer.

- a. False**
- b. True

31. If the page size increases, the internal fragmentation is also..?

- a. Increases**
- b. Decreases
- c. Remain constant
- d. None

32. Which of the following is a single-user operating system?

- a. Android
- b. Windows
- c. MAC
- d. Ms - DOS**

33. The size of virtual memory is based on the address bus.

- a. True**
- b. False

34. If a page number is not found in the translation lookaside buffer, then it is known as a?

- a. Transaction lookaside buffer hit.
- b. Transaction lookaside buffer miss.**
- c. Buffer miss.
- d. Buffer hit.

35. Windows XP supports the 64-bits. Windows XP is designed to expand the memory address space. Its original name is Microsoft Windows XP Professional x64 and it is based on the x86-64 architecture.

- a. False
- b. True**

36. Which of the following is not application software?

- a. Windows 7**
- b. Word pad
- c. Photoshop
- d. None of the above.

37. Undelete *.doc command is used to fetch a group (.doc) of files that have just been deleted.

- a. False
- b. **True**

38. Which of the following windows does not have a start button?

- a. Windows 7
- b. Windows XP
- c. **Windows 8**
- d. None of the above

39. Which program runs first after booting the computer and loading the GUI?

- a. **Authentication**
- b. File Manager
- c. Desktop Manager
- d. Windows Explorer

40. Which of the following is system software?

- a. **All of mention**
- b. Operation system
- c. Compiler
- d. Utilities

41. What type of commands are required to perform various tasks in DOS?

- a. **External commands**
- b. Internal commands
- c. Primary commands
- d. Valuable commands

42. Which windows was introduced to My Computer?

- a. **Windows 95**
- b. Windows 98
- c. Windows 10
- d. Windows XP

43. Windows 2002 operating systems were used to implement a client Server Network.

- a. **True**
- b. False

44. Windows 2002 is a server OS that was developed by Microsoft in April 24, 2002. It includes some features of Windows XP.

- a. False
- b. **True**

45. Which of the following is an example of a Real Time Operating System?

- a. **Process control**
- b. Windows 10
- c. MAC
- d. MS-DOS

46. Which of the following is group of programs?

- a. All
- b. Word
- c. Paint
- d. **Accessories**

47. Microsoft Windows is an operating system that was developed by Microsoft company. The Microsoft Windows is available in 32-bits and 64-bits in the market.

- a. **True**
- b. False

48. What is Microsoft window?

- a. Word processing
- b. Database program
- c. Graphics program
- d. **Operating System**

49. Which of the following does not interrupt the running process?

- a. It is done to illustrate that new defects are not introduced after adding a new functionality or correcting previous one.
- b. It is best candidate for automation.
- c. Regression testing can be performed on each level
- d. **It is done to illustrate that software is not changed internationally**

50. Which is/are the characteristics of equivalence partitioning?

- a. Device
- b. Time interrupt
- c. Power failure
- d. **Scheduler process**

51. Who among the following can block the running process?

- a. Fork
- b. Read
- c. Down
- d. All of above

52. The system call provides an interface for user programs to access the services of the operating system through the API (Application Program Interface).

- a. True
- b. False

53. In paged memory systems, if the page size is increased, then the internal fragmentation generally becomes more

- a. True
- b. False

54. Where are placed the list of processes that are prepared to be executed and waiting?

- a. Job queue
- b. Process queue
- c. Ready Queue
- d. None of the above

55. DOS stands for Disk Operating System.

- a. True
- b. False

56. Which of the following is a condition that causes deadlock?

- a. Mutual Exclusion
- b. Hold and wait
- c. No pre-emptive
- d. All of above

57. DOS stands for Disk operating system. Disk operating system is a single-user operating system that does not support more than one program at a time.

- a. False
- b. True

58. The systems which allow only one process execution at a time, are called

- a. Multitasking system
- b. Unitasking system
- c. Uniprogramming systems
- d. **Uniprocessing system**

59. The address of the next instruction to be executed by the current process is provided by the _____

- a. **Program counter**
- b. CPU register
- c. Program counter
- d. Pipes

60. Wait system call can be used by a parent process to determine the termination of child process.

- a. **True**
- b. False

61. Process stack contains Function parameters, Local variables and Return address. It does not contain the PID of child process.

- a. False
- b. **True**

62. Deadlock is a situation which occurs because process A is waiting for one resource and holds another resource (blocking resource). At the same time another process B demands blocking a resource as it is already held by a process A, process B is waiting state unless and until process A releases occupied resource.

- a. **True**
- b. False

63. What is inter-process communication?

- a. Communication within the process
- b. **Communication between two process**
- c. Communication between two threads
- d. None of above

64. What is the ready state of a process?

- a. When process is using CPU
- b. When process is unable to run
- c. Both a and b
- d. **When process is ready to run after some execution**

65. A process can be terminated due to _____

- a. Killed by another process
- b. Fatal error
- c. Normal exit
- d. **All of above**

66. In Unix, Which system call creates the new process?

- a. New
- b. Create
- c. **Fork**
- d. None

67. fork() system call returns a process ID which is generally the process id of the child process created.

- a. **True**
- b. False

68. The RR scheduling algorithm is

- a. Either preemptive or non-preemptive
- b. Non preemptive
- c. **Preemptive**
- d. All of above

69. What is the objective of multiprogramming?

- a. To decrease CPU utilization
- b. Have a process running at all time
- c. **To increase CPU utilization**
- d. None of above

70. The solution to the problem of indefinite blockage of low-priority process is aging.

- a. **True**
- b. False

71. PCB stands for

- a. **Process Control Block**
- b. Process Constant Block
- c. Progress Constant Block
- d. None of above

72. A single thread of control allows the process to perform only one task at a time. In the case of multi-core, multiple threads can be run simultaneously and can perform multiple tasks at a time.

- a. **Yes**
- b. No

73. What is the degree of multiprogramming?

- a. The number of processes in executed per unit time
- b. The number of processes in ready queue
- c. The number of processes in I/O queue
- d. **The number of processes in memory**

74. The entry of all the PCBs of the current processes is in _____

- a. Program counter
- b. Process unit
- c. Process register
- d. **Process table**

75. What is a Process Control Block?

- a. **Data structure**
- b. Process type variable
- c. A secondary storage section
- d. None of above

76. Which of the following is not the state of a process?

- a. Running
- b. Waiting
- c. New
- d. **Old**

77. A Process Control Block(PCB) does not contain which of the following?

- a. Stack
- b. Data
- c. **Bootstrap program**
- d. Code

78. The number of processes completed per unit time is known as _____

- a. Capacity
- b. **Throughput**
- c. Output
- d. Efficiency

79. Which of the following do not belong to queues for processes?

- a. Job queue
- b. **PCB queue**
- c. Device queue
- d. Ready queue

80. If all processes I/O bound, the ready queue will almost always be _____ and the Short term Scheduler will have a _____ to do.

- a. Empty, lot
- b. **Empty, little**
- c. Full, lot
- d. Full, little

81. Process Control Block is also known as Task Control Block.

- a. False
- b. **True**

82. A parent process calling _____ system call will be suspended until children processes terminate.

- a. Exit
- b. Exec
- c. Fork
- d. **Wait**

83. Cascading termination refers to termination of all child processes if the parent process terminates _____

- a. Normally or abnormally
- b. Abnormally
- c. **Normally**
- d. None

84. The child process can be a duplicate of the parent process.

- a. False
- b. **True**

85. Message Passing system allows processes to communicate with each other with sharing the same address space.

- a. **False**
- b. True

86. Bounded capacity and Unbounded capacity queues are referred to as Automatic buffering.

- a. **True**
- b. False

87. What is Inter process communication?

- a. All of the mentioned
- b. allows the processes to only synchronize their actions without communication
- c. allows processes to communicate and synchronize their actions when using the same address space
- d. **allows processes to communicate and synchronize their actions**

88. The Zero Capacity queue _____

- a. **is referred to as a message system with no buffering**
- b. is referred to as a message system with buffering
- c. is referred to as a link
- d. None of above

89. In the Zero capacity queue the sender blocks until the receiver receives the message. Zero capacity queue has maximum capacity of Zero; thus message queue does not have any waiting message in it.

- a. False
- b. **True**

90. In the non blocking send _____

- a. **the sending process sends the message and resumes operation**
- b. the sending process keeps sending until the message is received
- c. the sending process keeps sending until it receives a message
- d. none of the mentioned

91. Which process can be affected by other processes executing in the system?

- a. **Cooperating process**
- b. Child process
- c. Init process
- d. Parent process

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

- a. Thread
- b. Pipe
- c. **Semaphore**
- d. Socket

93. Messages sent by a process _____

- a. **can be fixed or variable size**
- b. have to be a variable size
- c. have to be of a fixed size
- d. none

94. What is Inter process communication?

- a. allows the processes to only synchronize their actions without communication
- b. **allows processes to communicate and synchronize their actions**
- c. allows processes to communicate and synchronize their actions when using the same address space
- d. None of above

95. Which of the following two operations are provided by the IPC facility?

- a. write & delete message
- b. send & delete message
- c. **receive & send message**
- d. delete & receive message

96. The link between two processes P and Q to send and receive messages is called _____

- a. process link
- b. **Message passing link**

- c. Synchronization link
- d. **Communication link**

97. A semaphore is a shared integer variable that can drop below zero.

- a. True
- b. **False**

98. In indirect communication between processes P and Q _____

- a. **there is a mailbox to help communication between P and Q**
- b. there is another machine between the two processes to help communication
- c. there is another process R to handle and pass on the messages between P and Q
- d. none

99. When a high priority task is indirectly preempted by a medium priority task effectively inverting the relative priority of the two tasks, the scenario is called priority inversion.

- a. **True**
- b. False

100. What is an ISR?

- a. Interrupt Service Request
- b. Information Service Request
- c. Information Service Routine
- d. **Interrupt Service Routine**

101. Which operation is performed by an interrupt handler?

- a. Saving the current state of the system
- b. Loading the interrupt handling code and executing it
- c. Once done handling, bringing back the system to the original state it was before the interrupt occurred
- d. **All of above**

102. How does the Hardware trigger an interrupt?

- a. **Sending signals to CPU through a system bus**
- b. Executing a special program called system program
- c. Executing a special operation called system call
- d. Executing a special program called interrupt program

103. DMA is used for _____

- a. All of above
- b. Utilizing CPU cycles

- c. Low speed devices
- d. **High speed devices**

104. In the layered approach of Operating Systems highest layer is user interface.

- a. **True**
- b. False

105. Which one of the following cannot be scheduled by the kernel?

- a. Kernel level thread
- b. **User level thread**
- c. Process
- d. None of the above

106. Process are classified into different groups in _____

- a. round robin scheduling algorithm
- b. priority scheduling algorithm
- c. **multilevel queue scheduling algorithm**
- d. None

107. Which algorithm is defined in Time quantum?

- a. shortest job
- b. **round robin**
- c. priority
- d. multilevel queue

108. In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of _____

- a. all process
- b. parent process
- c. **currently running process**
- d. init process

109. In priority scheduling algorithm _____

- a. Equal priority processes cannot be scheduled
- b. CPU is allocated to the process with lowest priority
- c. **CPU is allocated to the process with highest priority**
- d. None of above

110. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?

- a. Priority
- b. Shortest job
- c. **FCFS**
- d. None of above

111. The interval from the time of submission of a process to the time of completion is termed as turnaround time.

- a. **True**
- b. False

112. If a defect is delayed for later phases it proves _____ costly.

- a. Less
- b. **More**
- c. Extra
- d. Lesser

113. Dispatcher module gives control of the CPU to the process selected by the short-term schedule

- a. False
- b. **True**

114. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called ready queue

- a. **True**
- b. False

115. CPU scheduling is the basis of _____

- a. Large memory sized system
- b. **Multiprogramming OS**
- c. Multiprocessor system
- d. None of above

116. With multiprogramming _____ is used productively.

- a. space
- b. **time**
- c. money
- d. None

117. What are the two steps of a process execution?

- a. Memory Burst
- b. **I/O & OS Burst**

c. CPU & I/O Burst

d. CPU Burst

118. What is Response time?

- a. the total time taken from the submission time till the first response is produced**
- b. the total time taken from the submission time till the completion time
- c. the total time taken from submission time till the response is output
- d. None of above

119. Scheduling is done so as to _____

- a. Keep the waiting time same
- b. Decrease the waiting time**
- c. Increase the waiting time
- d. None

120. What is Waiting time?

- a. Total time spent in the blocked
- b. Total time spent in the running queue
- c. Total time spent in the waiting queue
- d. Total time spent in the ready queue**

121. Scheduling is done so as to _____

- a. Keep the turnaround time same
- b. Increase the turnaround time
- c. Decrease the turnaround time**
- d. None of the above

122. What is Turnaround time?

- a. the total time spent in the running queue
- b. the total time spent in the ready queue
- c. the total waiting time for a process to finish execution
- d. the total time from the completion till the submission of a process**

123. Scheduling is done so as to increase the throughput

- a. False
- b. True**

124. Scheduling is done so as to _____

- a. All of above
- b. Keep the CPU more idle
- c. Decrease CPU utilization
- d. Increase CPU utilization**

125. Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____

- a. Shortened unchanged
- b. Lengthened, unchanged
- c. Lengthened, shortened
- d. **Shortened, lengthened**

126. Which of the following algorithms tends to minimize the process flow time?

- a. Earliest deadline first
- b. Longest job first
- c. **SJF**
- d. FCFS

127. Orders are processed in the sequence they arrive if _____ rule sequences the jobs.

- a. **FCFS**
- b. Critical ratio
- c. Earliest due date
- d. Slack time remaining

128. What is Scheduling?

- a. Both a and b
- b. Making proper use of processor
- c. **allowing a job to use the processor**
- d. None of above

129. What is FIFO algorithm?

- a. first executes the job that came in last in the queue
- b. first executes the job that needs minimal processor
- c. **first executes the job that came in first in the queue**
- d. first executes the job that has maximum processor needs

130. There are 10 different processes running on a workstation. Idle processes are waiting for an input event in the input queue. Busy processes are scheduled with the Round-Robin time sharing method. Which out of the following quantum times is the best value for small response times, if the processes have a short runtime, e.g. less than 10ms?

- a. $T_q = 50\text{ms}$
- b. $T_q = 45\text{ms}$
- c. $T_q = 40\text{ms}$
- d. **$T_q = 15\text{ms}$**

131. The strategy of making processes that are logically runnable to be temporarily suspended is called _____

- a. FCFS
- b. SJF
- c. Non-preemptive scheduling
- d. **Preemptive scheduling**

132. To avoid deadlock _____

- a. all deadlocked processes must be aborted
- b. resource allocation must be done only once
- c. Both a and b
- d. **there must be a fixed number of resources to allocate**

133. A problem encountered in multitasking when a process is perpetually denied necessary resources is called _____

- a. **Starvation**
- b. Deadlock
- c. Inversion
- d. Aging

134. For an effective operating system, check for deadlock every time a resource request is made at fixed time intervals.

- a. False
- b. **True**

135. What is the drawback of banker's algorithm?

- a. in advance processes rarely know how much resource they will need
- b. the number of processes changes as time progresses
- c. resource once available can disappear
- d. **all the above**

136. The circular wait condition can be prevented by _____

- a. All of the mention
- b. Using pipes
- c. Using threads
- d. **Defining a linear bordering of resource types**

137. Which one of the following is the deadlock avoidance algorithm?

- a. **Banker's algorithm**
- b. Karn's algorithm

- c. Round robin algorithm
- d. All of above

138. A system is in the safe state if _____

- a. None of the mentioned
- b. All of the mentioned
- c. there exist a safe sequence
- d. the system can allocate resources to each process in some order and still avoid a deadlock

139. Each entry in a translation lookaside buffer (TLB) consists of key.

- a. True
- b. False

140. What is a reusable resource?

- a. that can be used by more than one process at a time
- b. that can be shared between various threads
- c. that can be used by one process at a time and is not depleted by that use
- d. All of above

141. The request and release of resources are _____

- a. Interrupts
- b. Command line statements
- c. System calls
- d. Special programs

142. Given a priori information about the _____ number of resources of each type that maybe requested for each process, it is possible to construct an algorithm that ensures that the system will never enter a deadlock state.

- a. average
- b. approximate
- c. minimum
- d. maximum

143. A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 tape drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is?

- a. 5
- b. 3

- c. 1
- d. 2

144. Binding of instructions and data to memory addresses can be done at _____

- a. Load time
- b. Execution time
- c. Compile time
- d. All the above

145. The _____ swaps processes in and out of the memory.

- a. User
- b. CPU
- c. CPU manager
- d. memory manager

146. If binding is done at assembly or load time, then the process _____ be moved to different locations after being swapped out and in again.

- a. must
- b. can
- c. can never
- d. may

147. The address loaded into the memory address register of the memory is referred to as _____

- a. memory address
- b. Local address
- c. Logical address
- d. physical address

148. The size of a process is limited to the size of _____

- a. internal memory
- b. external storage
- c. Logical memory
- d. physical memory

149. Swapping requires a _____

- a. Internal memory
- b. Monitor

- c. Motherboard
- d. **keyboard**

150. The major part of swap time is _____ time.

- a. **Transfer**
- b. Execution
- c. Waiting
- d. None

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

- a. **cache**
- b. accumulator
- c. disk buffer
- d. stack pointer

152. Using transient code, _____ the size of the operating system during program execution.

- a. **changes**
- b. increases
- c. decreases
- d. constant

153. Physical memory is broken into fixed-sized blocks called _____

- a. **Frames**
- b. aging
- c. pages
- d. none

154. Each entry in a segment table has a _____

- a. **segment base**
- b. segment peak
- c. segment value
- d. none of above

155. The protection bit is 0/1 based on _____

- a. write only
- b. read only
- c. **read - write**
- d. none of above

156. If there are 32 segments, each of size 1Kb, then the logical address should have _____

- a. 16 bit
- b. 15 bit
- c. 13 bit
- d. 20 bit

157. Consider a computer with 8 Mbytes of main memory and a 128K cache. The cache block size is 4 K. It uses a direct mapping scheme for cache management. How many different main memory blocks can map onto a given physical cache block?

- a. 16
- b. 8
- c. 64
- d. 256

158. The percentage of times a page number is found in the TLB is known as _____

- a. miss ratio
- b. miss percent
- c. hit ratio
- d. hit percent

159. Illegal addresses are trapped using the _____ bit.

- a. error
- b. valid
- c. valid - invalid
- d. access

160. If a page number is not found in the TLB, then it is known as a _____

- a. Buffer miss
- b. TLB hit
- c. TLB miss
- d. Buffer hit

Notes & Tips

1. All these MCQ Questions are for practice & have taken from your syllabus.
2. Don't Byheart, understand the concept.
3. Do more and more practice.
4. Read your Textbooks 1st and then practice this MCQ's.



Motivational Quotes

Don't Stress.

Do Your Best.

Forget the Rest.