

1. Why does a process use Register?
 - a. To give the address of next line
 - b. To execute the Process
 - c. To save the data of previous process
 - d. None of the above.
2. Which Address has Page number and Page offset?
 - a. Page Address
 - b. Logical Address
 - c. Physical Address
 - d. Frame Address
3. Which of the below must always be equal?
 - a. Frame size and Process size
 - b. Process size and Frame size
 - c. Page size and Frame size
 - d. Page size and Process size
4. In addresses like logical and physical, the numbers are represented in
 - a. Binary
 - b. Decimal
 - c. Hexa- Decimal
 - d. Octal
5. What is throughput?
 - a. Performance by result
 - b. Output performance
 - c. Tasks that executed in a time
 - d. All of the above.
6. In which of the following the processes are not interrupted?
 - a. Short remaining time first
 - b. Long remaining time first
 - c. First come First serve
 - d. All of the following

PROCESS	ARRIVAL	BURST TIME
P1	0	1
P2	1	2
P3	2	3
P4	3	4

7. What is the arrival time of P4 in the Gantt Chart for the?
 - a. 3

- b. 4
- c. 5
- d. 6

8. What is the TAT for P2?

- a. 1
- b. 2
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9. How many processes have the waiting time as zero ?

- a. 0
- b. 1
- c. 2
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10. Which of the following is the disadvantage of demand paging?

- a. Reduces memory requirement
- b. High degree of multiprogramming
- c. Page fault
- d. All of the above

11. If the page fault has occurred then the OS will create?

- a. Memory Access
- b. Trap
- c. Encryption
- d. Decryption

12. What separates logical memory from physical memory?

- a. Secondary memory
- b. Main memory
- c. Virtual memory
- d. None of the above

13. OS will check for authentication when?

- a. Page fault occurs
- b. Demand paging
- c. Degree of multiprogramming has decreased.
- d. Degree of multiprogramming has increased.

14. $EMAT = p (PFST) + (1-p) (\text{access time of main memory})$. What does the p stands for?

- a. Page fault
- b. Page fault service
- c. Probability of page fault
- d. None of the above

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

- a. Decreases
- b. Increases
- c. Remains constant

d. None of these

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

a. Windows

b. MAC

c. Ms-Dos

d. None of these

17. The size of virtual memory is based on which of the following?

a. CPU

b. RAM

c. Address bus

d. Data bus

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

a. Timer interrupt

b. Device

c. Power failure

d. Scheduler process

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

a. MAC

b. MS-DOS

c. Windows 10

d. Process Control

20. Which of the following is system software?

a. Operating system

b. Compiler

c. Utilities

d. All of the above

21. What type of scheduling is round-robin scheduling?

- a. Linear data scheduling
- b. Non-linear data scheduling
- c. Preemptive scheduling
- d. Non-preemptive scheduling

22. Which of the following options is correct about the windows operating system?

- a. Windows is a CUI operating system.
- b. Windows is based on CUI.
- c. Windows is a GUI operating system.
- d. None of the these

23. Which of the following scheduling algorithms is preemptive scheduling?

- a. FCFS Scheduling
- b. SJF Scheduling
- c. Network Scheduling
- d. SRTF Scheduling

24 . Which of the following operating systems does not require a command to run?

- a. Kali Linux
- b. Windows
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25. The operating system work between

- a. User and Computer
- b. Network and User
- c. One user to another user
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26. What is the paging in the operating system?

- a. Memory management scheme
- b. Network management scheme
- c. Internet management scheme
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27. Which of the following programs is loaded first when starting a computer?

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28. Which of the following scheduling algorithm is non-preemptive scheduling?

- a. SJF scheduling
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- c. SRTF scheduling
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29. Which of the following scheduling reduces process flow time?

- a. FCFS
- b. LIFO
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Consider the following three processes in the FCFS.

PROCESS	ARRIVAL	BURST TIME
P1	3	3
P2	6	6
P3	9	9

30. What is the average waiting time?

- a. 2
- b. 3
- c. 4
- d. 5

31. What is the completion time of P3?

- a. 3
- b. 6
- c. 9
- d. 12

32. What is the average Turnaround Time ?

- a. 9
- b. 10**
- c. 12
- d. 15

33. In which allocation method does the user size the file before creating the file?

- a. Contiguous**
- b. Linked
- c. Indexed
- d. None of the these

34. Which of the following component does not belong to PCB (Process Control Block)?

- a. CPU registers
- b. CPU scheduling information
- c. Operating System information**
- d. Accounting information

35. Which of the following methods is used to improve the main memory utilization?

- a. Swapping**
- b. Operating system
- c. Memory stack
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36. Which of the following operating systems supports only real-time applications?

- a. Batch OS
- b. Distributed OS

c. Real-time OS

d. Network OS

37. Which of the following statements is correct about fragmentation?

a. It is software that connects the OS.

b. It is part of the software.

c. Loss the memory

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38. The PCB is identified by _____.

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d. Integer Process ID

39. Which of the following statements is correct about virtual memory?

a. It is a combination of the logical-memory and physical-memory

b. It is a separation of user logical memory and physical memory

c. It is a virtual network memory

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40. Who is responsible for keeping the process from the program?

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41. Which one of the following can be handled by the OS?

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

42. A system which allows only one process execution at one time is called?

- a. Uniprogramming
- b. Uniprocessing
- c. Unitasking
- d. None of the above

43. Contiguous memory Allocation is an allocation in which

- a. Same process allocated in different memory areas
- b. All processes allocated in the same area
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44. Contiguous memory Allocation has a disadvantage of

- a. Memory fragmentation
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45. In contiguous memory allocation _____ has no cure.

a. Internal fragmentation

b. External fragmentation

c. Inline fragmentation

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46. Compaction is used to overcome the problem of

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b. Internal Fragmentation

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47. A process can be of

a. Single threaded

b. Multi threaded

c. Both

d. None of the above

48. A process control block consists of

a. Process ID

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a. Array

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50. The list of processes waiting for I/O device is

a. Device queue

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51. A process swapped out of memory later swapped into memory by

a. Long term Scheduler

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a. Context Switch

- b. Fork child
- c. System Call
- d. None of the above

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a. Stack overflow

b. Page fault

c. High utilization of memory

d. Poor utilization of memory

First Come First serve

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 - c. 4
 - d. 7
56. How many processes have the waiting time as zero ?
- a. 0
 - b. 1
 - c. 2
 - d. 3
57. Virtual memory means
- a. Creating extra memory
 - b. Storing in a secondary memory device
 - c. Creating an illusion
 - d. None of the above
58. Which of the following is the disadvantage of demand paging?
- a. Reduces memory requirement
 - b. High degree of multiprogramming
 - c. Page fault
 - d. All of the above
59. If the page fault has occurred then the OS will create?
- a. Memory Access
 - b. Trap
 - c. Encryption
 - d. Decryption
60. What separates logical memory from physical memory?
- a. Secondary memory

- b. Main memory
- c. Virtual memory
- d. None of the above

61. OS will check for authentication when?

- a. Page fault occurs
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- c. Degree of multiprogramming has decreased.
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62. $EMAT = p (PFST) + (1-p) (\text{access time of main memory})$. What does the p stands for?

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- c. Probability of page fault
- d. None of the above

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

- a. Decreases
- b. Increases
- c. Remains constant
- d. None of these

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

- a. Windows
- b. MAC
- c. Ms-Dos
- d. None of these

65. The size of virtual memory is based on which of the following?

- a. CPU
- b. RAM
- c. Address bus
- d. Data bus

66. Which of the following is not application software?

- a. Windows 7
- b. WordPad
- c. Photoshop

d. MS-excel

67. Who provides the interface to access the services of the operating system?

a. API

b. System call

c. Library

d. Assembly instruction

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

a. Job queue

b. Ready queue

c. Execution queue

d. Process queue

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

a. Fork

b. Read

c. Down

d. All of these

70. Which of the following statements is correct about fragmentation?

a. It is software that connects the OS.

b. It is part of the software.

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71. The PCB is identified by _____.

- a. Real-Number
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72. Which of the following statements is correct about virtual memory?

- a. It is a combination of the logical-memory and physical-memory
- b. It is a separation of user logical memory and physical memory
- c. It is a virtual network memory
- d. None of the these

73. Who is responsible for keeping the process from the program?

- a. Operating system
- b. CPU
- c. Monitor
- d. All of the these

74. What gives the address of the next line of the code which has to be executed in the process?

- a. List of Open Files
- b. Process Number
- c. Process counter
- d. Register

75. Why does a process use Register?
- a. To give the address of next line
 - b. To execute the Process
 - c. To save the data of previous process
 - d. None of the above.
76. When two or more processes are ready to execute then what is that queue called?
- a. Ready queue
 - b. Device Queue
 - c. Waiting Queue
 - d. All of the Above
77. What changes when the current activity of a process changes?
- a. Process number
 - b. Process Counter
 - c. Process State
 - d. Process file
78. Where does the paging happen?
- a. Secondary memory
 - b. Main memory
 - c. Both
 - d. None of the Above
79. Which Address has Page number and Page offset?
- a. Page Address
 - b. Logical Address
 - c. Physical Address
 - d. Frame Address
80. Which of the below must always be equal?
- a. Frame size and Process size
 - b. Process size and Frame size
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81. A process control block consists of
- a. Process ID
 - b. Process State
 - c. Registers
 - d. All of the above
82. The ready queue is generally stored in the form of

- a. Array
- b. Stack**
- c. Linked list
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83. The list of processes waiting for I/O device is

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84. A process swapped out of memory later swapped into memory by

- a. Long term Scheduler
- b. Medium Term Scheduler**
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86. Memory Fragmentation results in

- a. Stack overflow
- b. Page fault
- c. High utilization of memory

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87. Which of the below must always be equal?

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89. What is throughput?

- a. Performance by result
- b. Output performance
- c. Tasks that executed in a time
- d. All of the above.

90. Why is memory management restricted?

- a. Main memory
- b. Secondary memory
- c. Memory division
- d. None of the above

91. What are the tasks which are not handled by Storage management?

- a. Secondary Devices
- b. File System
- c. Disk Architecture
- d. API

92. Which of the following is not a function of the OS?

- a. Management of Resources
- b. Security
- c. File Structure
- d. Memory Management

93. What level of language is used in process management?

- a. Low- level Language
- b. Medium - Level Language
- c. High- Level Language
- d. All of the above

94. What is the unit of execution within a process?

- a. Deadlock
- b. Thread
- c. Segment
- d. Page

95. Where can we see the programs which are running in our system?
- a. Task manager
 - b. Thread Explorer
 - c. Process Manager
 - d. None of the above
96. When does the process get interrupted?
- a. I/O wait
 - b. Scheduler Dispatch
 - c. Priority of process
 - d. When the process is admitted to ready
97. Which scheduler leads to multiprogramming?
- a. Short term Scheduler
 - b. Medium term Scheduler
 - c. Long term Scheduler
 - d. All of the Above
98. What is an additional state which occurred by the Medium Term scheduler?
- a. Schedule dispatch
 - b. Wait
 - c. Suspend Wait
 - d. Schedule Wait
99. Which of the following share the same kind of data?
- a. Deadlocks
 - b. Processes
 - c. Registers
 - d. Threads
100. How many times does the fork child repeat the system calls?
- a. $2^{(n-1)}$
 - b. 2^n
 - c. $2^{[n(n-1)]}$
 - d. $(2^n)-1$
101. In which of the following if the parent is blocked and it will never affect the child?
- a. Process
 - b. Thread
 - c. Counters
 - d. Registers
102. Which level of Thread is the integral part of the OS?
- a. User Level
 - b. Kernel Level
 - c. Machine level
 - d. All of the above
103. Which level is faster?
- a. User Level
 - b. Kernel Level

- c. Machine level
- d. All of the above

104. Which of the following is not a disadvantage of Fixed Partitioning?

- a. Internal fragmentation
- b. Limits process size
- c. Limit on degree of multiprogramming
- d. None of the above

105. Compaction can be done even though it's complicated?

- a. Fixed Partitioning
- b. Variable Partitioning
- c. Segmentation
- d. Paging

PROCESS	ARRIVAL	BURST TIME
P1	0	5
P2	1	4
P3	2	2
P4	4	1

(Round Robin)
Time Quantum = 2

106. How many times the context switching is happening?

- a. 2
- b. 4
- c. 5
- d. 6

107. What is the completion time for P1?

- a. 5
- b. 7
- c. 10
- d. 12

108. What is the TAT for P4?

- a. 4
- b. 5
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- b. Increases
- c. Remains constant
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116. Which of the following is a single-user operating system?

- a. Windows
- b. MAC
- c. Ms-Dos
- d. None of these

117. What is the paging in the operating system?

- a. Memory management scheme
- b. Network management scheme
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118. Which of the following programs is loaded first when starting a computer?

- a. Window desktop
- b. Network connection program
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- d. CMD

119. Which of the following scheduling algorithm is non-preemptive scheduling?

- a. SJF scheduling
- b. Round-Robin scheduling
- c. SRTF scheduling
- d. None of these.

120. Which of the following scheduling reduces process flow time?

- a. FCFS
- b. LIFO
- c. SJF
- d. All of the these

Consider the following three processes in the FCFS.

PROCESS	ARRIVAL	BURST TIME
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P1	3	3
P2	6	6
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121. What is the average waiting time?

- a. 2
- b. 3**
- c. 4
- d. 5

122. What is the completion time of P3?

- a. 3
- b. 6
- c. 9**
- d. 12

123. What is the average Turnaround Time ?

- a. 9
- b. 10**
- c. 12
- d. 15

124. In which allocation method does the user size the file before creating the file?

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- b. Linked
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125. Which of the following component does not belong to PCB (Process Control Block)?

- a. CPU registers
- b. CPU scheduling information
- c. Operating System information
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126. Which of the following methods is used to improve the main memory utilization?

- a. Swapping
- b. Operating system
- c. Memory stack
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127. Which of the following operating systems supports only real-time applications?

- a. Batch OS
- b. Distributed OS
- c. Real-time OS
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128. Which of the following statements is correct about fragmentation?

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- a. Internal fragmentation
- b. External fragmentation
- c. Inline fragmentation
- d. Outline fragmentation

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- a. External fragmentation

- b. Internal Fragmentation
- c. Page fault
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138. A process can be of

- a. Single threaded
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- c. Both
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