## Đề cương POP cuối học phần (Full)

- 1. In Linux, to increase the response time and throughput, the kernel minimizes the frequency of the disk access by keeping a pool of the internal data buffer called
  - a. Spooling
  - b. Buffer cache
  - c. Swapping
  - d. Pooling
- 2. The powerful text editor called PC-Write can be used by anybody by paying a small fee. Such programs are called
  - a. Software
  - b. Firmware
  - c. Shareware
  - d. Mindware
- 3. Object code
  - a. is ready to execute
  - b. must be "loaded" before execution
  - c. must be rewritten before execution
  - d. is the output of compilers, but not assemblers
- 4. In Linux, the ASCII text file can be saved without any extension

True

- 5. Restricting the child process to a subset of the parent's resources prevents any process from
  - a. crashing the system by utilizing multiple resources
  - b. under-loading the system by very less CPU utilization
  - c. overloading the system by creating a lot of sub-processes
  - d. overloading the system by using a lot of secondary storage
- 6. When a computer is first turned on or restarted, a special type of absolute loader is executed, called a
  - a. Relating loader
  - b. "Compile and Go" loader
  - c. Boot loader
  - d. Bootstrap loader
- 7. The computational technique used to compute the disk storage address of individual records is called
  - a. bubble memory
  - b. hashing
  - c. dynamic reallocation
  - d. keyfielding
- 8. Under multiprogramming, turnaround time for short jobs is usually \_\_\_\_\_ and that for long jobs is slightly \_\_\_\_\_
  - a. Shortened; Unchanged
  - b. Shortened; Lengthened
  - c. Shortened; Shortened
  - d. Lengthened; Shortened

9. Which of the following statements is true? a. Seek analysis is used for analyzing control-unit busy problems. b. Thrashing is a natural consequence of virtual memory systems. c. The LRU algorithm pages out pages that have been used recently. 10. The FCFS algorithm is particularly troublesome for \_\_\_\_\_\_ a. time sharing systems b. multiprocessor systems c. multiprogramming systems d. operating systems 11. If you want to execute more than one program at a time, the system software you are using must be capable of: a. multitasking b. compiling c. virtual memory d. word processing 12. Process are classified into different groups in a. round robin scheduling algorithm b. shortest job scheduling algorithm c. priority scheduling algorithm d. multilevel queue scheduling algorithm 13. Block caches or buffer caches are used a. to speed up maim memory read operation b. to improve disk performance c. to handle interrupts

d. to increase the capacity of the main memory

- 14. Virtual memory is
  - a. less efficient in utilization of memory
  - b. useful when fast I/O devices are not available
  - c. simple to implement
  - d. is used in all major commercial operating systems
- 15. Seek analysis
  - a. is used for analyzing control-unit busy problems
  - b. is used for analyzing device busy problems
  - c. is only shown on real-time displays
  - d. is used for analyzing paging problems
- 16. Which of the following statements is false?
- a. A process scheduling algorithm is preemptive if the CPU can be forcibly removed from a process
- b. Real-time systems generally use non-preemptive CPU scheduling
- c. Response time are more predictable in preemptive systems than in non-preemptive systems
- d. Time sharing systems generally use preemptive CP39U scheduling
- 17. The details of all external symbols and relocation formation (relocation list or map) is provided to linker by
  - a. Translator
  - b. Loader
  - c. Macro processor
  - d. Editor

- 18. When a process terminates:
  - a. Its process control block is never de-allocated
  - b. It is removed from all, but the job queue
  - c. Its process control block is de-allocated
  - d. It is removed from all queues
- 19. The function(s) performed by paging software is (are)
  - a. All of the choices
  - b. Sharing and protection
- c. Implementation of the access environment for all programs in the system
  - d. Management of the physical address space
- 20. In which addressing mode the operand is given explicitly in the instruction?
  - a. Index mode
  - b. Absolute mode
  - c. Indirect mode
  - d. Immediate mode
- 21. Assembly code data base is associated with
- a. assembly language version of the program which created by the code generation phase and is input to the assembly phase.
- b. a permanent table of decision rules in the form of patterns for matching with the uniform symbol table to discover syntactic structure.
- c. consists of a full or partial list of the token's as they appear in the program. Created by lexical analysis and used for syntax analysis and interpretation
- d. a permanent table which lists all key words and special symbols of the language in symbolic form.

- 22. In Linux, which command is used to see the list of users who are currently logged in?
  - a. which
  - b. who
  - c. users
  - d. login
- 23. A Processor
  - a. is a sequence of instructions
- b. is typically characterized by interactive processing and time of the CPU's time to allow quick response to each user
- c. is a device that performs a sequence of operations specified by instructions of the memory
  - d. is the device where information is stored
- 24. Thread to be executed is target thread

- 25. While working with MS-DOS, which command will you use to transfer a specific file from one disk to another?
  - a. DISKCOPY
  - b. RENAME
  - c. FORMAT
  - d. COPY

26. In Linux, which command is used to list all the files in your current directory (including hidden)?
a. Is –a
<i>b. l</i> s − <i>t</i>
c. Is –i
d. Is-I
27. Resolution of externally defined symbols is performed by
a. Linker
b. Loader
c. Compiler
d. Assembler
28. The state transition initiated by the user process itself in an operating systems is
a. dispatch
b. wake up
c. block
d. timer run out
29. A process is selected from the queue by the scheduler, to be executed
a. blocked, short term
b. ready, short term
c. ready, long term
d. wait, long term

- 30. The function(s) of the file system is (are)
- a. to provide security against loss of information due to system failure
  - b. all of the choices
- c. to provide the complete file naming freedom to the users and to permit controlled sharing of files
- d. to provide for long and short term storage of files with appropriate economic tradeoffs
- 31. What is the name given to the values that are automatically provided by software to reduce keystrokes and improve a computer user's productivity?
  - a. Default values
  - b. Fixed values
  - c. Defined values
  - d. Special values
- 32. When high priority task is indirectly preempted by medium priority task effectively inverting the relative priority of the two tasks, the scenario is called
  - a. priority removal
  - b. priority modification
  - c. priority exchange
  - d. priority inversion
- 33. The most common security failure is
  - a. too much emphasis on the preventing physical access
  - b. insufficient technology used to prevent breaches
  - c. carelessness by users
  - d. depending on passwords

- 34. What is the ready state of a process?
  - a. when process is scheduled to run after some execution
  - b. when process is using the CPU
- c. when process is unable to run until some task has been completed
- 35. The FIFO algorithm
  - a. first executes the job that has the maximum processor needs
  - b. first executes the job that came in last in the queue
  - c. first executes the job that came in first in the queue
  - d. first executes the job that need minimal processor
- 36. When several processes access the same data concurrently and the outcome of the execution depends on the particular order in which the access takes place, is called
  - a. essential condition
  - b. dynamic condition
  - c. critical condition
  - d. race condition
- 37. The most optimal scheduling algorithm is
  - a. RR Round Robin
  - b. SJF Shortest Job First
  - c. FCFS First come First served
- 38. Most of the modern operating systems today are hybrid systems

39. CPU scheduling is the basis of \_\_\_\_\_ a. larger memory sized systems b. multiprogramming operating systems c. multiprocessor systems 40. Assembler language a. is a mnemonic form of machine language b. is quite different from the SCL interpreter c. requires fixed-format commands d. is usually the primary user interface 41. Trojan-Horse programs a. are legitimate programs that allow unauthorized access b. usually are immediately discovered c. do not usually work d. are hidden programs that do not show up on the system 42. The register or main memory location which contains the effective address of the operand is known as a. special location b. pointer c. indexed register d. scratch pad 43. Advantage(s) of the using assembly language rather than machine language is (are) a. Addresses any symbolic, not absolute b. Introduction of data to program is easier c. It is mnemonic and easy to read d. All of the choices

- 44. Backups should be done
  - a. weekly for most installations
  - b. as several incrementals, followed by an image copy
  - c. daily for most installations
  - d. as several image copies, followed by an incremental
- 45. The working set theory of programming behavior of processes within an operating system involves
  - a. assigning the CPU to processes
  - b. coalescing holes in memory
  - c. disk scheduling mechanisms
  - d. the collection of pages that a process accesses
- 46. Which of the following commands is used to count number of lines in a file?
  - a. wc-c
  - b. wc -w
  - c. wc-l
- 47. Which one of the following is not a real-time operating system?
  - a. Windows CE
  - b. VxWorks
  - c. RTLinux
  - d. Palm OS
- 48. With Round Robin, scheduling algorithm in a time shared system
  - a. uses extremely small time slices increases performance
- b. uses very large time slices converts it into First come First served scheduling algorithm
- c. uses very small time slices converts it into Shortest Job First algorithm
- d. uses very small time slices converts it into First come First served scheduling algorithm

- 49. Which of the following software types is used to simplify using system software?
  - a. Multitasking
  - b. Spreadsheet
  - c. Operating environment
  - d. Timesharing
- 50. Which of the following is true of machine language?
  - a. Depicting flow of data in a system
  - b. Repeated execution
- c. A sequence of instructions which, when followed properly, solves a problem
- d. The language which communicates with the computer using only the binary digits 1 and 0
- 51. Which is the core of the Linux operating system?
  - a. Script
  - b. Commands
  - c. Shell
  - d. Kernel
- 52. What is the name given to the organized collection of software that controls the overall operation of a computer?
  - a. Working system
  - b. Operating system
  - c. Controlling system
  - d. Peripheral system

- 53. In multilevel feedback of scheduling algorithm
  - a. processes are not classified into groups
  - b. classification of ready queue is permanent
  - c. a process can move to a different classified ready queue
- 54. The child process completes execution, but the parent keeps executing, then the child process is known as
  - a. Dead
  - b. Zombie
  - c. Body
  - d. Orphan
- 55. A single thread of control allows the process to perform
  - a. multiple tasks at a time
  - b. only two tasks at a time
  - c. only one task at a time
- 56. The link between two processes P and Q to send and receive messages is called
  - a. synchronization link
  - b. message-passing link
  - c. communication link
- 57. Which of the following checks cannot be carried out on the input data to a system?
  - a. Syntax check
  - b. Range check
  - c. Consistency check

58. 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. Suspended state b. Blocked state c. Terminated state d. Ready state 59. In priority scheduling algorithm a. CPU is allocated to the process with highest priority b. CPU is allocated to the process with lowest priority c. Equal priority processes cannot be scheduled 60. Turnaround time is a. the total time from the completion till the submission of a process b. the total time spent in the ready queue c. the total waiting time for a process to finish execution d. the total time spent in the running queue 61. Which command is/are used to remove directory in Linux? a. rmdir b. rmdir or rm –r c. rm -r 62. A Process Control Block (PCB) does not which of the following:

a. Code

c. Data

d. Stack

b. Bootstrap program

63. If a deadlock is detected, operating system should always kill the process in the deadlock

True

- 64. The objective of multiprogramming is to:
  - a. Have multiple programs waiting in a queue ready to run
  - b. Have some processes running at all times
  - c. To minimize CPU utilization
- 65. A semaphore is a shared integer variable
  - a. that cannot be more than zero
  - b. that cannot drop below one
  - c. that cannot drop below zero
  - d. that cannot be more than one
- 66. In Linux, which combination of keys is used to exit from terminal?
  - a. Ctrl + d
  - b. Ctrl + e
  - c. Ctrl + t
  - d. Ctrl + z
- 67. The FIFO algorithm
  - a. executes first the job with the least processor needs
  - b. executes first the job that has been in queue the longest
  - c. executes first the job that first entered the queue
  - d. executes first the job that last entered the queue

68. A thread is also called a Heavy Weight Process (HWP)

True

- 69. A public key encryption system
  - a. allows only the correct sender to decode the data
  - b. does not encode the data before transmitting it
  - c. allows anyone to decode the information
  - d. allows only the correct receiver to decode the data
- 70. The instruction register
- a. contains the address of the memory location that is to be read from or stored into
- b. is a hardware memory device which denotes the location of the current instruction being executed
- c. contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write"
- d. is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory
- 71. Poor response times are caused by
  - a. High paging rates
  - b. Any of the choices
  - c. Processor busy
  - d. High I/O rate

- 72. Which of the following are (is) Language Processor(s)?
  - a. Assemblers
  - b. All of the choices
  - c. Compilers
  - d. Interpreters
- 73. System maintenance
  - a. is usually not necessary
  - b. is not required if the system is well written
  - c. always requires several programs
  - d. is necessary on all systems, regardless of how good
- 74. Which of the following command(s) is/are used to reboot a Linux system?
  - a. reboot
  - b. all options are correct
  - c. init 6
  - d. shutdown -h
- 75. What is the name given to the software which can be legally compiled and often used for free?
  - a. Firmware program
  - b. Mindware
  - c. Public domain program
  - d. Shareware program

- 76. Which of the following capabilities is required for a system program to execute more than one program at a time?
  - a. Compiling
  - b. Multitasking
  - c. Virtual memory
  - d. Word processing
- 77. Which of the following OSes is not based on Linux?
  - a. BSD
  - b. Ubuntu
  - c. CentOS
  - d. Redhat
- 78. Which process can be affected by other processes executing in the system?
  - a. Parent process
  - b. Cooperating process
  - c. Init process
  - d. Child process
- 79. The process of transferring data intended for a peripheral device into a disk (or intermediate storage) so that it can be transferred to peripheral at a more convenient time or in bulk, is known as
  - a. multiprogramming
  - b. virtual programming
  - c. spooling
  - d. caching

- 80. The physical layer of a network
  - a. controls error detection and correction
  - b. constructs packets of data and sends them across the network
  - c. all of the choices
- d. defines the electrical characteristics of signals passed between the computer and communication devices
- 81. Round robin scheduling falls under the category of
  - a. Non preemptive scheduling
  - b. Preemptive scheduling
  - c. Non preemptive scheduling & Preemptive scheduling
- 82. Bootstrap program is known as firmware

- 83. In a multiprogramming environment
  - a. a single user can execute many programs at the same time
  - b. the processor executes more than one process at a time
  - c. more than one process resides in the memory
  - d. the programs are developed by more than one person
- 84. Multiprogramming
- a. allows multiple programs to reside in separate areas of core at the time
- b. consists of those addresses that may be generated by a processor during execution of a computation
  - c. is a method of allocation processing time
- d. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks

- 85. Which of the following is not true about the memory management?
  - a. Paging suffers from internal fragmentation
  - b. Segmentation suffers from external fragmentation
  - c. Segmented memory can be paged
  - d. Virtual memory is used only in multi-user systems
- 86. A process is a program in execution

- 87. Mutual exclusion can be provided by the
  - a. binary semaphores
  - b. both mutex locks and binary semaphores
  - c. mutex locks
- 88. Which of the following are TRUE for Direct Inter-Process Communication?
- a. A communication link can be associated with exactly two processes
  - b. Exactly two links exist between each pair of processes
- c. Exactly N/2 links exist between each pair of processes (N = max. number of processes supported by a system)
- d. A communication link can be associated with N number of processes (N = max. number of processes supported by a system)
- 89. Multiprogramming systems
  - a. executes more jobs in the same time period
  - b. are easier to develop than single programming systems
  - c. execute each job faster
  - d. are used only on large mainframe computers

- 90. A monitor is a module that encapsulates
  - a. shared data structures
  - b. synchronization between concurrent procedure invocation
  - c. all of the mentioned
  - d. procedures that operate on shared data structure
- 91. The principles of structured programming forbid the use of
  - a. IF-THEN-ELSE
  - b. WHILE-DO
  - c. DO-WHILE
  - d. GOTO
- 92. The switching of the CPU from one process or thread to another is called:
  - a. when a process goes from the running state to the waiting state
  - b. when a process switches from the waiting state to the ready state
  - c. when a process switches from the running state to the ready state
  - d. All of the mentioned
- 93. Which system call returns the process identifier of a terminated child?
  - a. fork
  - b. exit
  - c. get
  - d. wait

- 94. The advantage of a command processor running only built-in commands is
- a. the command set being common across different hardware configurations
- b. the processing is much faster than would otherwise be the case when user defined commands are used
  - c. users can create system programs and run them as commands
- d. flexibility to the users in running list of command by simply collecting them in named batch command files
- 95. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called
  - a. ready queue
  - b. job queue
  - c. execution queue
  - d. process queue
- 96. Which of the following is a phase of a compilation process?
  - a. Code generation
  - b. Lexical analysis
  - c. Lexical analysis AND Code generation
  - d. Static analysis
- 97. Which one of the following errors will be handled by the operating system?
  - a. Power failure
  - b. All of the choices
  - c. Connection failure in the network
  - d. Lack of paper in printer

- 98. A process can be terminated due to
  - a. fatal error
  - b. normal exit
  - c. killed by another process
  - d. all of the choices are correct
- 99. The systems which allow only one execution at a time, are called
  - a. uniprogramming systems
  - b. unitasking systems
  - c. uniprocessing systems
- 100. In an absolute loading scheme, which loader function is accomplished by loader?
  - a. Allocation
  - b. Linking
  - c. Loading
  - d. Reallocation
- 101. The primary purpose of an operating system is to
  - a. make computer easier to use
  - b. keep system programmers employed
  - c. make the most efficient use of the hardware
  - d. allow people to sue the computers
- 102. A process stack does not contain
  - a. return addresses
  - b. function parameters
  - c. PID of child process
  - d. local variables

103. Cascading terminations refers to termination of all child processes before the parent terminates
a. Normally
b Abnormally
104. What is a long-term scheduler?
a. It selects which process to remove from memory by swapping
b. It selects which process has to be brought into the ready queue
c. It selects which process had to be executed next and allocates CPU
105. Which of the following commands is used to count the number of lines in a file in Linux?
a. wc –w
b. wc -c
c. wc –I
106. In Linux, what command is used to remove files?
a. erase
b. delete
c. rm
d. dm
107. Which is a permanent database in the general model of compiler?
a. Source code
b. Identifier Table
c. Terminal Table
d. Literal Table

- 108. Object modules generated by assemblers that contain unresolved external references are resolved for two or more objects modules by a/an
  - a. compiler
  - b. operating system
  - c. linker
  - d. loader
- 109. A file system must be mounted before it can be accessed

False

- 110. The practice of "bundling" refers to
  - a. selling peripheral devices with computer
  - b. selling computers alone
  - c. selling software to run on computers
  - d. giving away software with a computer purchase
- 111. Claim edge converts to request edge when a process requests a source

## True

- 112. In Linux, which among the following interacts directly with system hardware?
  - a. Kernel
  - b. Commands
  - c. Shell
  - d. Applications

- 113. A solution to the problem of indefinite blockage of low-priority processes is
  - a. Starvation
  - b. Wait queue
  - c. Aging
  - d. Ready queue
- 114. In CPU scheduling, "aging" is
  - a. keeping track of how many times a given page is referenced
  - b. increasing the priority of jobs to ensure termination in a finite time
  - c. keeping track of cache contents
  - d. keeping track of what pages are currently residing in a memory
- 115. In Linux environment, at the start of the process execution, STDOUT & STDERR
  - a. Point to special files on the system
  - b. Point to current terminal device
  - c. Are closed
- 116. The only state transition that is initiated by the user process itself is
  - a. dispatch
  - b. wakeup
  - c. block

- 117. The technique for sharing the time of a computer among several jobs, which switches jobs so rapidly such that each job appears to have the computer to itself is
  - a. time out
  - b. time domain
  - c. time sharing
  - d. FIFO
- 118. The address of the next instruction to be executed by the current process is provided by the
  - a. program counter
  - b. CPU registers
  - c. process stack
  - d. pipe
- 119. Part of a program where the shared memory is accessed and which should be executed invisibly, is called
  - a. semaphores
  - b. directory
  - c. critical section
  - d. mutual exclusion
- 120. An incremental backup
  - a, should be done each month
  - b. uses more tapes
  - c. saves only files that have recently changed
  - d. saves all files

- 121. A partitioned data set is mostly used for
  - a. storing program data
  - b. storing ISAM files
  - c. storing backup information
  - d. a program of source library
- 122. How can you add Amit, a new user, to your system?
  - a. Using useradd
  - b. Using adduser
  - c. All of the choices
  - d. Using linuxconf
- 123. In priority scheduling algorithm, when a process arrives at the ready queue. Its priority is compared with the priority of
  - a. parent process
  - b. currently running process
  - c. init process
  - d. all processes
- 124. Relocating bits used by relocating loader are specified (generated) by
  - a. relocating loader itself
  - b. macro processor
  - c. assembler or translator
  - d. linker

- 126. What is a medium-term scheduler?
  - a. It selects which process to remove from memory by swapping
- b. It selects which process has to be executed next and allocates CPU
  - c. It selects which process has to be brought into the ready queue
- 127. An I/O bound program will typically have
  - a. a few very short CPU bursts
  - b. many very short CPU bursts
  - c. many very short I/O bursts
  - d. a few very short I/O bursts
- 128. Which command is used to change password of your Linux system?
  - a. change -p
  - b. password
  - c. passwd
  - d. pass
- 129. Which one of the following cannot be scheduled by the kernel?
  - a. Kernel level thread
  - b. Process
  - c. User level thread
- 130. In which of the storage placement strategies in a program is placed in the largest available hole in the main memory?
  - a. First fit
  - b. Buddy
  - c. Best fit
  - d. Worst fit

131. A parent process calling system call will be suspended until children processes terminate.
a. exit
b. fork
c. wait
d. exec
132. The higher versions of the operating systems are so written that programs designed for earlier versions can still be run. What is is called?
a. Upward compatibility
b. Universality
c. Upward mobility
d. Upgradability
133. The part of machine level instruction, which tell the central processor what has to be done, is
a. operation code
b. flip-flop
c. locator
d. address
134. What scheduling algorithm allows processes that are logical runnable to be temporarily suspended?
a. FIFO
b. FCFS
c. Preemptive scheduling
d. Non-preemptive scheduling

- 135. A translator is best described as
  - a. a hardware component
  - b. a system software
  - c. an application software
  - d. all of the above
- 136. If a process is executing in its critical session, the no other processes can be executing in the critical session. This condition is called
  - a. critical exclusion
  - b. mutual exclusion
  - c. asynchronous exclusion
  - d. synchronous exclusion
- 137. When the process issues an I/O request
  - a. It is placed in an I/O queue
  - b. It is placed in the Job queue
  - c. It is place in a waiting queue
  - d. It is placed in the ready queue
- 138. Which of the following is true for testing and debugging?
- a. Testing checks for logical errors in the programs, while debugging is a process of correcting those errors in the program
- b. Testing detects the syntax errors in the program while debugging corrects those errors in the program
  - c. Testing and debugging indicate the same thing

- 139. Which of the following might be used to convert high-level language instructions into machine language?
  - a. System software
  - b. An operating environment
  - c. Applications software
  - d. An interpreter
- 140. To access the services of operating system, the interfaces is provided by the
  - a. assembly instructions
  - b. system calls
  - c. library
  - d. API
- 141. In an absolute loading scheme, which loader function is accomplished by assembler?
  - a. Reallocation
  - b. Linking
  - c. Loading
  - d. Allocation
- 142. The main function of the dispatcher (the portion of the process scheduler) is
  - a. assigning ready process to the CPU
  - b. suspending some of the processes when the CPU load is high
  - c. bring processes from the disk to the main memory
  - d. swapping a process to the disk

143. Network File System (NFS) is a common distributed file-sharing method

True

- 144. The main function of the command interpreter is
  - a. to handle the files in operating system
  - b. none of the choices
  - c. to get and execute the next user-specified command
- d. to provide the interface between the API and user-specified command
- 145. In Linux, what command is used to remove the directory?
  - a. rd
  - b. rmdir
  - c. ridir
  - d. remove
- 146. With MS-DOS which command will divide the surface of the blank floppy disk in to sectors and assign a unique address to each one?
  - a. CHKDSK command
  - b. VER command
  - c. FORMAT command
  - d. FAT command
- 147. A system program that combines the separately compiled modules of a program into a form suitable for execution
  - a. cross compiler
  - b. load and go
  - c. assembler
  - d. linking loader

- 148. What is the purpose of the "touch" command?
  - a. It makes a new directory
  - b. It displays the content of a file
  - c. It creates a new empty file
  - d. It updates the timestamp of an already existing file
- 149. The system calls in UNIX is written using which language?
  - a. Assembly language
  - b. Fortran
  - c. C
  - d. C++
- 150. In which addressing mode the effective address of the operand is the contents of a register specified in the instruction and after accessing the operand, the contents of this register is incremented to point to the next item in the list?
  - a. index addressing
  - b. indirect addressing
  - c. auto increment
  - d. auto decrement
- 151. The most common system security method is
  - a. firewall
  - b. passwords
  - c. encryption
- 152. Which of the following is not true about documentation?
  - a. Documentation gives better understand of the problem
- b. Documentation, of a system, should be as clear and direct as possible
  - c. Documentation increases the maintenance time and cost

- 153. A program that converts a high-level language program to a set of instructions that can run on a computer is called a
  - a. Compiler
  - b. Editor
  - c. Debugger
- 154. Daisy chain is a device for
  - a. interconnecting a number of devices to a number of controllers
  - b. connecting a number of devices to a controller
  - c. connecting a number of controllers to a device
- 155. A non-relocatable program is one which
  - a. consists of a program and relevant information for its relocation
  - b. all of the choices
  - c. can itself performs the relocation of its address-sensitive portions
- d. cannot be made to execute in any area of storage other than the one designated for it at the time for its coding or translation
- 156. The operating system of a computer serves as a software interface between the user and
  - a. memory
  - b. screen
  - c. hardware
  - d. peripheral
- 157. The dispatcher
  - a. puts tasks in I/O wait
  - b. is always small and simple
  - c. actually schedules the tasks into the processor
  - d. never changes task priorities

- 158. Which of the following is not true?
- a. Kernel is made of various modules which cannot be loaded in running operating system
- b. Kernel is the program that constitutes the central core of the operating system
  - c. Kernel remains in the memory during the entire computer session
- d. Kernel is the first part of operating system to load into memory during booting
- 159. What is a short-term scheduler?
  - a. It selects which process to remove from memory by swapping
- b. It selects which process has to be executed next and allocates CPU
- c. It selects which process has to be brought into the ready queue 160. Which module gives control of the CPU to the process selected by the short-term scheduler?
  - a. Scheduler
  - b. Dispatcher
  - c. Interrupt
- 161. The primary job of the operating system of a computer is to
  - a. manage resources
  - b. be user friendly
  - c. provide utilities
  - d. command resources
- 162. Which of the following does not belong the queues of processes?
  - a. Device Queue
  - b. Process Control Block (PCB) Queue
  - c. Ready Queue
  - d. Job Queue
- 163. Scheduling is

- a. allowing jobs to use the processor
- b. unrelated to performance consideration
- c. not required in uniprocessor systems
- d. the same regardless of the purpose of the system
- 164. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
  - a. First-come, first-served scheduling
  - b. Shortest job scheduling
  - c. Priority scheduling
- 165. In which addressing mode the contents of a register specified in the instruction are first decremented, and then these contents are used as the effective address of the operator?
  - a. index addressing
  - b. auto increment
  - c. auto decrement
  - d. indirect addressing
- 166. Which of the following statements is not true about the FORTRAN language?
  - a. FORTRAN is a high-level language
- b. A FORTRAN program, written for the IBM-PC, is totally different from a FORTRAN program written for execution on the SUN machine
- c. FORTRAN is extensively used to write programs for performing scientific computations

- 167. The principle of locality of reference justifies the use of
  - a. cache memory
  - b. reenterable
  - c. virtual memory
  - d. non-reusable
- 168. The action of parsing the source program into the proper syntactic classes is known as
  - a. general syntax analysis
  - b. interpretation analysis
  - c. syntax analysis
  - d. lexical analysis
- 169. A program
- a. is typically characterized by interactive processing and time of the CPU's time to allow quick response to each user
  - b. is a sequence of instructions
  - c. is the device where information is stored
- d. is a device that performs a sequence of operations specified by instructions in memory
- 170. Inter process communication:
- a. allows the processes to synchronize their actions without communication
- b. allows processes to communicate and synchronize their actions when using the same address space
- c. allows processes to communicate and synchronize their actions without using the same address space

a. use minimal resources
b. are very appropriate for very large computers
c. all of the mentioned
d. use many resources
172. The term "polling" in a computer means a process by which a computer system
a. decides correct alternative by analyzing several ones
b. inquires to see if a terminal has any transaction to send
c. multiplexes the inputs and updates the memory accordingly
d. detects/corrects errors
173. Which of the following is/are the advantage(s) of modular programming?
a. The program is much easier to change
b. Easy debugging
c. Easy to compile
d. Modules can be reused in other programs
174. Linux is the best-known and often-used open-source operating system
True
False
175. 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, lot
b. empty, little
c. full, little
d. empty, lot

171. Complex scheduling algorithms

- 176. The two steps of a process execution are
  - a. Memory & I/O Burst
  - b. I/O & OS Burst
  - c. CPU & I/O Burst
  - d. OS & Memory Burst
- 177. A form of code that uses more than one process and processor, possibly of different types, and that may on occasions have more than one process or processor active at the same time, is known as
  - a. multithreading
  - b. time sharing
  - c. broadcasting
  - d. multiprogramming
- 178. A child process can
  - a. be a duplicate of the parent process
  - b. never be a duplicate of the parent process
  - c. cannot have another program loaded into it
  - d. never have another program loaded into it
- 179. By operating system, the resource management can be done via
  - a. none of the choices
  - b. space division multiplexing
  - c. time division multiplexing
  - d. both time and space division multiplexing
- 180. Scheduling is
  - a. making proper use of processor
  - b. allowing a job to use the processor

### 181. A task in a blocked state

- a. is waiting for same temporarily unavailable resources
- b. is running
- c. is executable
- d. must still be placed in the run queues
- 182. In which addressing mode, the address of the location of the operand is given explicitly as a part of the instruction?
  - a. Immediate mode
  - b. Absolute mode
  - c. Modulus mode
  - d. Index mode
- 183. Software that measures, monitors, analyzes, and controls realworld events is called
  - a. system software
  - b. business software
  - c. real-time software
  - d. scientific software
- 184. The state of a process is defined by
  - a. the activity just executed by the process
  - b. the current activity of the process
  - c. the final activity of the process
  - d. the activity to next be executed by the process

185. What is the name of the operating system which was originally designed by scientists and engineers for use by scientists and engineers?
a. XENIX
b. OS/2
c. MS DOS
d. UNIX
186. An instruction in programming language that is replaced by a sequence of instructions or compiling is known as
a. literal
b. label
c. procedure name
d. macro
187. The number of processes completed per unit time is known as
a. Throughput
b. Capacity
c. Output
d. Efficiency
188. Orders are processed in the sequence they arrive if rule sequences the jobs.
a. slack time remaining
b. critical ratio
c. first come, first served

d. earliest due date

- 189. The portion of the process scheduler in an operating system that dispatches processes is concerned with
  - a. assigning ready processes to CPU
  - b. assigning ready processes to waiting queue
  - c. assigning running processes to blocked queue
  - d. all of the mentioned
- 190. Special software to create a job queue is called a
  - a. Interpreter
  - b. Drive
  - c. Spooler
  - d. Linkage editor
- 191. The CPU, after receiving an interrupt from an I/O device
  - a. branches off to the interrupt service routine immediately
  - b. halts for a predetermined time
- c. branches off to the interrupt service routine after completion of the current instruction
- d. hands over control of address bus and data bus to the interrupting device
- 192. A translator which reads an entire program written in a high level language and converts it into machine language code is:
  - a. compiler
  - b. translator
  - c. system software
  - d. assembler

193. In Linux, which of the following commands is used to know the last shutdown/reboot date and time?

- a. lastreboot
- b. lastshutdown
- c. last
- d. lastlogin

194. Which of the following is a measure to test how good or bad modular design is?

- a. Static analysis
- b. Module coupling
- c. Module strength

195. Scheduling is done to

- a. increase the throughput
- b. increase the duration of a specific amount of work
- c. decrease the throughput

196. Which of the following system programs forgoes the production of object code to generate absolute machine code and load it into the physical main storage location form which it will be executed immediately upon completion of the assembly?

- a. load-and-go assembler
- b. macroprocessor
- c. two pass assembler
- d. compiler

197. In Linux, what file specifies the order in which to use specified name services?

- a. /etc/services
- b. /etc/nsswitch.conf
- c. /etc/nsorder
- d. /etc/hosts

198. Which of the following is a block device?

- a. mouse
- b. terminal
- c. disk
- d. printer

199. What is the name of the technique in which the operating system of a computer executes several programs concurrently by switching back and forth between them?

- a. Paging
- b. Partitioning
- c. Windowing
- d. Multitasking

200. The errors that can be pointed out by the compiler are

- a. Internal errors
- b. Syntax errors
- c. Logical errors
- d. Semantic errors

- 201. In Linux, wtmp utmp files contain
  - a. The user's command execution log
  - b. User login-logout log
  - c. Temporary system data
  - d. The user's su and sudo attempts
- 202. In the following case(s) non-preemptive scheduling occurs:
- a. When a process switches from the waiting state to the ready state
  - b. When a process goes from the running state to the waiting state
- c. When a process switches from the running state to the ready state
  - d. All of the mentioned
- 203. Time quantum is defined in
  - a. multilevel queue scheduling algorithm
  - b. priority scheduling algorithm
  - c. round robin scheduling algorithm
  - d. shortest job scheduling algorithm
- 204. Message passing system allows processes to:
  - a. communicate with one another without resorting to shared data
  - b. name the recipient or sender of the message
  - c. share data
  - d. communicate with one another by resorting to shared data
- 205. Which of the following scheduling algorithm gives minimum average waiting time?
  - a. SJF
  - b. FCFS
  - c. Priority
  - d. Round Robin

- 206. With multiprogramming, \_\_\_\_\_ is used productively. a. time b. all of the mentioned c. money d. space 207. The total time to prepare a disk drive mechanism for a block of data to be read from it is a. latency plus seek time b. latency plus seek time plus transmission time c. latency d. latency plus transmission time 208. An Inter Process Communication (IPC) facility provides at least two operations: a. send & delete message b. delete & receive message c. receive & send message d. write & delete message
- 209. Virtual Memory
- a. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.
  - b. is a method of allocating processor time.
- c. consists of those addresses that may be generated by a processor during execution of a computation.
- d. allows multiple programs to reside in separate areas of core at the time.

- 210. Suppose that a process is in "Blocked" state waiting for some I/O service. When the service is completed, it goes to the
  - a. Terminated State
  - b. Running State
  - c. Suspended State
  - d. Ready State
- 211. Which of the following systems software does the job of merging the records from two files into one?
  - a. Security software
  - b. Utility program
  - c. Documentation system
  - d. Networking software
- 212. Which is not true about an interpreter?
- a. Interpreter analyzes each source statement every time it is to be executed
  - b. Interpreter is a kind of translator
- c. Interpreter generates an object program from the source program
- 213. In Linux, what command is used with vi editor to delete a single character?
  - a. a
  - b. x
  - C. Z
  - d. y

- 214. Addressing modes
- a. defines the fundamental method of determining effective operand addresses.
  - b. all of the choices.
- c. performs indicated operations on two fast registers of the machine and leave the result in one of the registers.
- d. are variations in the use of fundamental addressing structures, or some associated actions which are related to addressing.
- 215. While running DOS on a PC, which command would be used to duplicate the entire diskette?
  - a. TYPE
  - b. DISKCOPY
  - c. COPY
  - d. CHKDSK
- 216. 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 of the following quantum times is the best value?
  - a. tQ = 50 ms
  - b.  $tQ = 15 \, \text{ms}$
  - c. tQ = 45 ms
  - d. tQ = 40 ms
- 217. Scheduling is done in order to
  - a. decrease CPU utilization
  - b. keep the CPU more idle
  - c. increase CPU utilization

218. In a magnetic disk, data is recorded in a set of concentric tracks which are subdivided into
a. periods
b. sectors
c. zones
d. groups
219. A sequence of instructions, in a computer language, to get the desired result, is known as
a. Algorithm
b. Decision Table
c. Program
220. With only one process can execute at a time; meanwhile all other processes are waiting for the processor. With more than one process can be running simultaneously each on a different processor.
a. Uniprogramming, Multiprocessing
b. Multiprogramming, Uniprocessing
c. Multiprocessing, Multiprogramming
d. Multiprogramming, Multiprocessing
221. If a process fails most operating system write the error information to a
a. none of the choices
b. another running process
c. new file
d. log file

222. In Linux, what command is used to count the total number of lines, words, and characters contained in a file?
a. count p
b. countw
c. wcount
d. wc
223. The command interpreter
a. requires fixed format commands
b. is usually the primary user interface
c. is menu drive
224. Page-map table is
a. All of the choices
b. A directory
c. Used for address translation
d. A data file
225. Information in a memory that is no longer valid or wanted is known as
a. volatile
b. garbage
c. non-volatile
d. surplus
226. Logical file system manages metadata information
True
False

- 227. A relationship between processes such that each has some part (critical section) which must not be executed while the critical section of another is being executed, is known as
  - a. multiprogramming
  - b. mutual exclusion
  - c. semaphore
  - d. multitasking
- 228. Ubuntu OS is developed based on Linux kernel

- 229. Which of the following programs is not a utility?
  - a. Debugger
  - b. Spooler
  - c. Editor
- 230. Which of the following is a synchronization tool?
  - a. Pipe
  - b. Socket
  - c. Thread
  - d. Semaphore
- 231. Data encryption
  - a. cannot be used by private installations
  - b. is mostly used by public networks
  - c. is not necessary, since data cannot be intercepted
  - d. is mostly used by financial networks

232. A hardware device that is capable of executing a sequence of instructions, is known as
a. ALU
b. Processor
c. CPU
d. CU
233. A set of processes is deadlock if
a. all processes are trying to kill each other
b. each process is terminated
c. each process is blocked and will remain so forever
234. What is the name of the system which deals with the running of the actual computer and not with the programming problems?
a. Source program
b. Operating system
c. Systems program
d. Object program
235. System programs such as Compilers are designed so that they are
a. reenterable
b. non reusable
c. serially usable
d. recursive
236. File & directory permissions in Linux are assigned by numerically only.
True
False
237. File is an abstract data type.
True
False

- 238. Which of the following algorithms tends to minimize the process flow time?
  - a. Shortest Job First
  - b. First come First served
  - c. Earliest Deadline First
  - d. Longest Job First
- 239. A development strategy whereby the executive control modules of a system are coded and tested first, is known as
  - a. Bottom-up development
  - b. Left-Right development
  - c. All of the choices
  - d. Top-down development
- 240. Which of the following is not the state of a process?
  - a. Old
  - b. Running
  - c. Waiting
  - d. New
- 241. The real difficulty with SJF in short term scheduling is:
  - a. knowing the length of the next CPU request
  - b. it is too complex to understand
  - c. it is too good for an algorithm

- 242. Which of the following addressing methods, facilitates access to an operand whose location is defined relative to the beginning of the data structure in which it appears?
  - a. index
  - b. indirect
  - c. ascending
  - d. sorting
- 243. To enable a process to wait within the monitor,
  - a. semaphore must be used
  - b. a condition variable must be declared as condition
  - c. condition variables must be used as Boolean objects
- 244. Which command is used to get the kernel version in Linux?
  - a. uname –r
  - b. uname -n
  - c. uname -s
  - d. kernel
- 245. All the time a computer is switched on, its operating system software has to stay in
  - a. main storage
  - b. disk drive
  - c. primary storage
  - d. floppy disk

246. What is the name given to the process of initializing a microcomputer with its operating system?

- a. Cold booting
- b. Booting
- c. Warm booting
- d. Boot recording

247. Consider the following set of processes, the length of the CPU burst time given in milliseconds:

#### **Processes**

Burst time

P1 6

P2 8

P3 7

P4 3

Assuming the above process being scheduled with the SJF scheduling algorithm

#### Select one:

- a. The waiting time process P1 is 0ms
- b. The waiting time process P1 is 16ms
- c. The waiting time process P1 is 9ms
- d. The waiting time process P1 is 3ms

248. Preemptive Shortest Job First scheduling is sometimes called

- a. HRRN scheduling Highest Response Ratio Next
- b. Fast SJF scheduling
- c. SRTN scheduling Shortest Remaining Time Next
- d. EDF scheduling Earliest Deadline First

249. When a source is released by a process, assignment edge reconverts to a request edge

True

- 250. The term "operating system" means
  - a. the way a computer operator works
  - b. the way a floppy disk drive operates
  - c. a set of programs which controls computer working
  - d. conversion of high level language into machine code
- 251. Which of the following is not applications software?
  - a. UNIX
  - b. Word processing
  - c. Desktop publishing
  - d. Spreadsheet
- 252. Which of the following commands can be used as an alternative to echo command in Linux?
  - a. print
  - b. printf
  - c. printr
- 253. The function(s) of the Storage Assignment is (are)
  - a. all of the choices
- b. to assign storage to literals, and to ensure that the storage is allocate and appropriate locations are initialized.
- c. to assign storage to all temporary locations that are necessary for intermediate results.
- d. to assign storage to all variables referenced in the source program.

- 254. The disadvantages of "Compile and Go" loading scheme is (are)
- a. a portion of memory is wasted because the core occupied by the assembler is unavailable to the object program
  - b. all of the choices
- c. it is necessary to retranslate the user's program deck every time it is run
- d. it is very difficult to handle multiple segments, especially if the source programs are in different languages, and to produce orderly modular programs.
- 255. The strategy of making processes that are logically runnable to be temporarily suspended is called
  - a. First come First served
  - b. Shortest job list
  - c. Non preemptive scheduling
  - d. Preemptive scheduling
- 256. Memory management is
  - a. replaced with virtual memory on current systems
  - b. not used on multiprogramming systems
  - c. critical for even the simplest operating systems
- 257. Swapping
  - a. works best with many small partitions
  - b. does not work with overlaying
  - c. allows many programs to use memory simultaneously
  - d. allows each program in turn to use the memory

- 258. An algorithm is best described as
  - a. All of the choices
  - b. A computer language
  - c. A step by step procedure for solving a problem
  - d. A branch of mathematics
- 259. The degree of multi programming is
  - a. the number of processes in the ready queue
  - b. the number of processes in memory
  - c. the number of processes executed per unit time
  - d. the number of processes in the I/O queue
- 260. Which of the following is characteristic of an operating system?
  - a. Resource management
  - b. Error recovery
  - c. Memory management
  - d. All of the choices
- 261. Assembler is
- a. a program that automates the translation of assembly language into machine language.
- b. a program that appears to execute a source program as if it were machine language.
- c. a program that accepts a program written in a high level language and produces an object program.
- d. a program that places programs into memory and prepares them for execution.

262. Which of the following terms refers to the degree to which data in a database system are accurate and correct?

- a. Data validity
- b. Data integrity
- c. Data independence
- d. Data security

263. Messages sent by a process

- a. have to be of a fixed size
- b. have to be a variable size
- c. can be fixed or variable sized

264. Process synchronization can be done on

- a. hardware level
- b. software level
- c. both hardware and software level

265. Which of the following introduction steps, would be written within the diamond-shaped box, of a flowchart?

- a. IS A<10
- b. S = B C
- c. PRINT A
- d. DATA X,4Z

266. In Linux, which system call creates the new process?

- a. fork
- b. new
- c. create

- 267. The interval from the time of submission of a process to the time of completion is termed as
  - a. response time
  - b. waiting time
  - c. throughput
  - d. turnaround time
- 268. A disk scheduling algorithm in an operating system causes the disk arm to move back and forth across the disk surface to service all requests in its path. This is a
  - a. First come first served
  - b. FIFO
  - c. Scan
  - d. Shortest Seek Time First (SSTE)
- 269. Scissoring enables
  - a. entire data to be displayed
  - b. a part of data to be displayed
  - c. full data display on full area of the screen
  - d. no data to be displayed
- 270. What is operating system?
  - a. All of the choices
  - b. Link to interface the hardware and application programs
  - c. Collection of programs that manages hardware resources
  - d. System service provider to the application program
- 271. Linux terminal is case-sensitive

- 272. An SJF algorithm is simply a priority algorithm where the priority is
  - a. the current CPU burst
  - b. the predicted next CPU burst
  - c. anything the user wants
  - d. the inverse of the predicted next CPU burst
- 273. The SJF algorithm executes the first job
  - a. with the least processor needs
  - b. that last entered the queue
  - c. that has been in the queue the longest
  - d. that first entered the queue
- 274. The advantage(s) inherent to using high level languages is (are)
  - a. Improved debugging capacity, and superior documentation
- b. Fewer people, less management and shorter transition in learning time
  - c. A greater degree of machine independence
  - d. All of the choices
- 275. Which of the following filename extension suggest that the file is a backup copy of another file?
  - a. BAK
  - b. COM
  - c. TXT
  - d. BAS

# 276. Bug means

- a. Documenting programs using an efficient documentation tool
- b. All of the choices
- c. A difficult syntax error in a program
- d. A logical error in a program
- 277. Which of the following are loaded into main memory when the computer is booted?
  - a. Utility programs
  - b. Word processing instructions
  - c. External command instructions
  - d. Internal command instructions
- 278. Under virtual storage,
  - a. only the active pages of a program are stored in primary storage
  - b. a single program is processed by two or more CPUs
  - c. two or more programs are stored concurrently in primary storage
  - d. interprogram interference may occur
- 279. The function(s) of the Syntax phase is (are)
  - a. to build the literal table and an identifier table.
- b. to recognize the major constructs of the language and to call the appropriate action routines that will generate the intermediate form of matrix for these constructs.
  - c. to build a uniform symbol table.
- d. to parse the source program into the basic elements or tokens of the language

- 280. Which directory in Linux contains all the config file of the system?
  - a. /bin
  - b. /lib
  - c. /var
  - d. /etc

# 281. A linker

- a. is not necessary with variable partitions
- b. must be run after the loader
- c. creates a load module
- d. is not needed with a good compiler

# 282. Paging

- a. is a method of allocating processor time.
- b. consists of those addresses that may be generated by a processor during execution of a computation.
- c. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.
- d. allows multiple programs to reside in separate areas of core at the time.
- 283. What is interprocess communication?
  - a. communication within the process
  - b. communication between two threads of the same process
  - c. communication between two processes

- 284. A self-relocating program is one which
  - a. consists of a program and relevant information for its relocation.
- b. cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation.
- c. can itself performs the relocation of its address-sensitive portions.
- 285. Kernel is the most important part of every operating system

False

286. Pthread API is OS-independent

True

- 287. Which of the following commands is used to create file in Linux?
  - a. touch
  - b. echo
  - c. all of the choices are correct
  - d. cat
- 288. The primary distinction between the short term scheduler and the long term scheduler is
  - a. The frequency of their execution
  - b. The length of their queues
  - c. The type of processes they schedule
- 289. Solaris is the name of a flavor of UNIX from
  - a. Digital Equipment Corp
  - b. HP
  - c. IBM
  - d. Sun Microsystems

290. Access time is the highest in the case of a. swapping devices b. floppy disk c. magnetic disk d. cache 291. Scheduling is done so as to a. keep the turnaround time same b. decrease the turnaround time c. there is no relation between scheduling and turnaround time d. increase the turnaround time 292. Two basic types of operating system are: a. sequential and real-time b. sequential and direct c. batch and interactive d. batch and timesharing 293. A compiler for a high-level language that runs on one machine and produces code for a different machine is called a. optimizing compiler b. multipass compiler c. cross compiler d. one pass compiler 294. Device driver controls the logical device

True

- 295. Dispatch latency is:
- a. the time of dispatching a process from running to ready state and keeping the CPU idle
  - b. the time to stop one process and start running another one
- c. the speed of dispatching a process from running to the ready state
- 296. Which facility dynamically adds probes to a running system, both in user processes and in the kernel?
  - a. DAdd
  - b. DLocate
  - c. DMap
  - d. DTrace
- 297. Under multiprogramming, turnaround time for short jobs is usually \_\_\_\_\_ and that for long jobs is slightly \_\_\_\_\_
  - a. lengthened; lengthened
  - b. lengthened; shortened
  - c. shortened; lengthened
  - d. shortened; shortened
- 298. What is the name of the operating system that reads and reacts in terms of actual time?
  - a. Quick response system
  - b. Time sharing system
  - c. Real time system
  - d. Batch system
- 299. With virtualization software, computer users can work with 2 operating systems simultaneously.

300. What is the name given to all the programs inside the computer with makes it usable?

- a. Firmware
- b. Application software
- c. Shareware
- d. System software

### Question # 1

In Linux, to increase the response time and throughput, the kernel minimizes the frequency of disk access by keeping a pool of internal data buffer called

### Select one:

- a. Spooling
- b. Buffer cache
- c. Swapping
- d. Pooling

The correct answer is: Buffer cache

Question #2

The powerful text editor called PC-Write can be used by anybody by paying a small fee. Such programs are called

# Select one:

- a. Software
- b. Firmware
- c. Shareware
- d. Mindware

The correct answer is: Shareware

Question #3

Object code

#### Select one:

- a. is ready to execute
- b. must be "loaded" before execution
- c. must be rewritten before execution
- d. is the output of compilers, but not assemblers

The correct answer is: must be "loaded" before execution

Question #4

In Linux, ASCII text file can be saved without any

extension Select one:

True

False

The correct answer is 'True'.

Question #5

Restricting the child process to a subset of the parent's resources prevents any process from :

#### Select one:

- a. crashing the system by utilizing multiple resources
- ь. under-loading the system by very less CPU utilization
- c. overloading the system by creating a lot of sub-processes

d. overloading the system by using a lot of secondary storage

The correct answer is: overloading the system by creating a lot of subprocesses

Question #6

When a computer is first turned on or restarted, a special type of absolute loader is executed, called a

# Select one:

- a. Relating loader
- ь. "Compile and Go" loader
- c. Boot loader
- d. Bootstrap loader

The correct answer is: Bootstrap loader

Question #7

The computational technique used to compute the disk storage address of individual records is called:

# Select one:

- a. bubble memory
- ь. *hashing*
- c. dynamic reallocation
- d. *key fielding*

The correct answer is: hashing
Question # 8
Under multiprogramming, turnaround time for short jobs is usually and that for long jobs is slightly
Select one:
a. Shortened; Unchanged
b. Shortened; Lengthened
c. Shortened; Shortened
d. Lengthened; Shortened
The correct answer is: Shortened; Lengthened
Question # 9
Which of the following statement is true.
Select one:
a. Seek analysis is used for analysing control-unit busy problems.
b. Thrashing is a natural consequence of virtual memory systems.
c. The LRU algorithm pages out pages that have been used recently
The correct answer is: Seek analysis is used for analysing control-unit busy problems.
Question # 10
The FCFS algorithm is particularly troublesome for
Select one:

- a. time sharing systems
- b. multiprocessor systems
- c. multiprogramming systems
- d. operating systems

The correct answer is: multiprogramming systems

Question # 11

If you want to execute more than one program at a time, the systems software you are using must be capable of:

## Select one:

- a. multitasking
- ь. compiling
- c. virtual memory
- d. word processing

The correct answer is: multitasking

Question # 12

Process are classified into different groups in

- a. round robin scheduling algorithm
- ь. shortest job scheduling algorithm
- c. priority scheduling algorithm
- d. multilevel queue scheduling algorithm

The correct answer is: multilevel queue scheduling algorithm

Question # 13

Block caches or buffer caches are used

## Select one:

- a. to speed up main memory read operation
- b. to improve disk performance
- c. to handle interrupts
- d. to increase the capacity of the main memory

The correct answer is: to improve disk performance

Question # 14

Virtual memory is

#### Select one:

- a. less efficient in utilization of memory
- b. useful when fast I/O devices are not available
- c. simple to implement
- d. used in all major commercial operating systems

The correct answer is: used in all major commercial operating systems

Question # 15

Seeks analysis

## Select one:

- a. is used for analyzing control-unit busy problems
- b. is used for analyzing device busy problems
- c. is only shown on real-time displays
- d. is used for analyzing paging problems

The correct answer is: is used for analyzing device busy problems

Question # 16

Which of the following statements is false?

#### Select one:

- a. a process scheduling algorithm is preemptive if the CPU can be forcibly removed from a process
- b. real time systems generally use non-preemptive CPU scheduling
- c. response time are more predictable in preemptive systems than in non preemptive systems
- d. time sharing systems generally use preemptive CPU scheduling

The correct answer is: real time systems generally use non-preemptive CPU scheduling

Question # 17

The details of all external symbols and relocation formation (relocation list or map) is provided to linker by

- a. Translator
- ь. Loader

- c. Macro processor
- d. Editor

The correct answer is: Translator

Question # 18

When a process terminates:

#### Select one:

- a. Its process control block is never de-allocated
- b. It is removed from all, but the job queue
- c. Its process control block is de-allocated
- d. It is removed from all queues

The correct answer is: It is removed from all queues

Question # 19

The function(s) performed by the paging software is (are)

#### Select one:

- a. All of the choices
- b. Sharing and protection
- c. Implementation of the access environment for all programs in the system
- d. Management of the physical address space

The correct answer is: All of the choices

## Question #20

In which addressing mode the operand is given explicitly in the instruction?

#### Select one:

- a. index mode
- ь. absolute mode
- c. indirect mode
- d. immediate mode

The correct answer is: immediate mode

Question #21

Assembly code data base is associated with

#### Select one:

- a. assembly language version of the program which is created by the code generation phase and is input to the assembly phase.
- b. a permanent table of decision rules in the form of patterns for matching with the uniform symbol table to discover syntactic structure.
- c. consists of a full or partial list or the token's as they appear in the program. Created by Lexical analysis and used for syntax analysis and interpretation.
- d. a permanent table which lists all key words and special symbols of the language in symbolic form.

The correct answer is: assembly language version of the program which is created by the code generation phase and is input to the assembly phase.

## Question #22

In Linux, which command is used see the list of users who are currently logged-in?

Select

one: a.

which

- b. who
- c. users
- d. login

The correct answer is: who

Question #23

A Processor

#### Select one:

- a. is a sequence of instructions
- b. is typically characterized by interactive processing and time of the CPU's time to allow quick response to each user.
- c. is a device that performs a sequence of operations specified by instructions in memory.
- d. is the device where information is stored

The correct answer is: is a device that performs a sequence of operations specified by instructions in memory.

Question #24

Thread to be executed is target thread

The correct answer is: Is -a
Question # 27
Resolution of externally defined symbols is performed by
Select
one: a.
Linker
b. Loader
c. Compiler
d. Assembler
The correct answer is: Linker
Question # 28
Question # 28 The state transition initiated by the user process itself in an operating
Question # 28 The state transition initiated by the user process itself in an operating
Question # 28 The state transition initiated by the user process itself in an operating system is
Question # 28 The state transition initiated by the user process itself in an operating system is Select
Question # 28 The state transition initiated by the user process itself in an operating system is  Select one: a.
Question # 28 The state transition initiated by the user process itself in an operating system is  Select one: a. dispatc
Question # 28 The state transition initiated by the user process itself in an operating system is  Select one: a. dispatc h
Question # 28 The state transition initiated by the user process itself in an operating system is  Select one: a. dispatc h b. wake up

The correct answer is: block	
Question # 29	
A process is selected from the queue by the scheduler, to be executed.	
Select one:	
a. blocked, short term	
o. ready, short term	
e. ready, long term	

The correct answer is: ready, short term

Question #30

d. wait, long term

The function(s) of file system is (are):

## Select one:

a. to provide security against loss of information due to system failure b. all of the choices

- c. to provide complete file naming freedom to the users and to permit controlled sharing of files
- d. to provide for long and short term storage of files with appropriate economic tradeoffs.

The correct answer is: all of the choices

Question #31

What is the name given to the values that are automatically provided by software to reduce keystrokes and improve a computer user's productivity?

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- a. Default values
- b. Fixed values
- c. Defined values
- d. Special values

The correct answer is: Default values

Question #32

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

## Select one:

- a. priority removal
- b. priority modification
- c. priority exchange
- d. priority inversion

The correct answer is: priority inversion

Question #33

The most common security failure is

- a. too much emphasis on preventing physical access
- b. insufficient technology used to prevent breaches
- c. carelessness by users
- d. depending on passwords

The correct answer is: carelessness by users

Question # 34

What is the ready state of a process?

#### Select one:

- a. when process is scheduled to run after some execution
- b. when process is using the CPU
- c. when process is unable to run until some task has been completed

The correct answer is: when process is scheduled to run after some execution

Question #35

The FIFO algorithm:

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

The correct answer is: first executes the job that came in first in the queue

Question #36

When several processes access the same data concurrently and the outcome of the execution depends on the particular order in which the access takes place, is called

## Select one:

- a. essential condition
- ь. dynamic condition
- c. critical condition
- d. race condition

The correct answer is: race condition Question # 37 he most optimal scheduling algorithm is:

## Select one:

- a. RR Round Robin
- b. SJF Shortest Job First
- c. FCFS First come First served

The correct answer is: SJF - Shortest Job First

Question # 38

Most of the mordern operating systems today are the hybrid systems

Select one:
True
False
The correct answer is 'True'.
Question # 39
CPU scheduling is the basis of
Select one:
a. larger memory sized systems
ь. multiprogramming operating systems
c. multiprocessor systems
The correct answer is: multiprogramming operating systems
Question # 40
Assembler language
Select one:
a. is a mnemonic form of machine language
b. is quite different from the SCL interpreter
c. requires fixed-format commands
d is usually the primary user interface

The correct answer is: is a mnemonic form of machine language Question # 41

# Trojan-Horse programs

## Select one:

- a. are legitimate programs that allow unauthorized access
- b. usually are immediately discovered
- c. do not usually work
- d. are hidden programs that do not show up on the system

The correct answer is: are legitimate programs that allow unauthorized access

Question # 42

The register or main memory location which contains the effective address of the operand is known as

## Select one:

- a. special location
- b. *pointer*
- c. indexed register
- d. scratch pad

The correct answer is: pointer

Question # 43

Advantage(s) of using assembly language rather than machine language is (are):

- a. Addresses any symbolic, not absolute
- b. Introduction of data to program is easier
- c. It is mnemonic and easy to read.
- d. all of the choices

The correct answer is: all of the choices

Question # 44

Backups should be done

#### Select one:

- a. weekly for most installations
- b. as several incrementals, followed by an image copy
- c. daily for most installations
- d. as several image copies, followed by an incremental

The correct answer is: as several incrementals, followed by an image copy Question # 45

The working set theory of programming behaviour of processes running within an operating system involves

- a. assigning the CPU to processes
- ь. coalescing holes in memory
- c. disk scheduling mechanisms
- d. the collection of pages that a process accesses

The correct answer is: the collection of pages that a process accesses

Question # 46

Which of the following command is used to count number of lines in a file?

## Select

one: a.

WC -C

b. WC -W

c. WC -1

The correct answer is: wc -l

Question # 47

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

## Select one:

- a. Windows CE
- b. VxWorks
- c. RTLinux
- d. Palm OS

The correct answer is: Palm OS

Question # 48

With round robin, scheduling algorithm in a time shared system

## Select one:

- a. uses extremely small time slices increases performance
- b. uses very large time slices converts it into First come First served scheduling algorithm
- c. uses very small time slices converts it into Shortest Job First algorithm
- d. uses very small time slices converts it into First come First served scheduling algorithm

The correct answer is: uses very large time slices converts it into First come First served scheduling algorithm

Question # 49

Which of the following software types is used to simplify using systems software?

#### Select one:

- a. multitasking
- b. spreadsheet
- c. operating environment
- d. timesharing

The correct answer is: timesharing

Question # 50

Which of the following is true for machine language?

- a. Depicting flow of data in a system
- b. Repeated execution of program segments

- c. A sequence of instructions which, when followed properly, solves a problem
- d. The language which communicates with the computer using only the binary digits 1 and 0.

The correct answer is: The language which communicates with the computer using only the binary digits 1 and 0.

Question #51

Which is the core of the Linux operating system?

Select

one: a.

Script

- b. Commands
- c. Shell
- d. Kernel

The correct answer is: Kernel

Question # 52

What is the name given to the organized collection of software that controls the overall operation of a computer?

- a. Working system
- b. Operating system
- c. Controlling system
- d. Peripheral system

The correct answer is: Operating system

Question #53

In multilevel feedback scheduling algorithm

## Select one:

- a. processes are not classified into groups
- b. classification of ready queue is permanent
- c. a process can move to a different classified ready queue

The correct answer is: a process can move to a different classified ready queue

Question # 54

The child process completes execution, but the parent keeps executing, then the child process is known as :

Select

one: a.

Dead

- b. Zombie
- c. Body
- d. Orphan

The correct answer is: Zombie

Question #55

A single thread of control allows the process to perform:

## Select one:

- a. multiple tasks at a time
- b. only two tasks at a time
- c. only one task at a time

The correct answer is: only one task at a time

Question # 56

The link between two processes P and Q to send and receive messages is called:

## Select one:

- a. synchronization link
- ь. message-passing link
- c. communication link

The correct answer is: communication link

Question #57

Which, of the following checks, cannot be carried out on the input data to a system?

- a. Syntax check
- ь. Range check
- c. consistency check

The correct answer is: Syntax check

Question #58

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 :

#### Select one:

- a. Suspended state
- ь. Blocked state
- c. Terminated state
- d. Ready state

The correct answer is: Ready state

Question # 59

In priority scheduling algorithm

#### Select one:

- a. CPU is allocated to the process with highest priority
- b. CPU is allocated to the process with lowest priority
- c. Equal priority processes can not be scheduled

The correct answer is: CPU is allocated to the process with highest priority

Question # 60

Turnaround time is:

## Select one:

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

The correct answer is: the total time from the completion till the submission of a process

Question #61

Which command is/are used to remove directory in Linux?

Select

one: a.

rmdir

b. rmdir or rm -r

c. rm -r

The correct

answer is: rmdir or

rm -r

Question # 62

A Process Control Block(PCB) does not contain which of the following:

Select
one: a.
Code
ь. Bootstrap program
c. Data
d. Stack
The correct answer is: Bootstrap program
Question # 63
If a deadlock is detected, operating system should always kill the process in the deadlock
Select one:
True
False
The correct energy is !Feles!
The correct answer is 'False'.
Question # 64
The objective of multiprogramming is to :
Select one:
a. Have multiple programs waiting in a queue ready to run
b. Have some process running at all times
c. To minimize CPU utilization

The correct answer is: Have some process running at all times

## Question # 65

# A semaphore is a shared integer variable

#### Select one:

- a. that can not be more than zero
- ь. that can not drop below one
- c. that can not drop below zero
- d. that can not be more than one

The correct answer is: that can not drop below zero

Question # 66

In Linux, which combination of keys is used to exit from terminal?

Select

one: a.

Ctrl + d

- ь. *Ctrl* + е
- c. Ctrl + t
- d. Ctrl + z

The correct answer is: Ctrl + d

Question # 67

The FIFO algorithm

- a. executes first the job with the least processor needs
- b. execute first the job that has been in the queue the longest

c. executes first the job that first entered the queue
d. executes first the job that last entered the queue
The correct answer is: executes first the job that first entered the queue
Question # 68
A thread is also called a Heavy Weight Process (HWP)
Select one:
True
False
The correct answer is 'False'.
Question # 69
A public key encryption system
Select one:
a. allows only the correct sender to decode the data
b. does not encode the data before transmitting it
c. allows anyone to decode the transmission
d. allows only the correct receiver to decode the data
The correct answer is: allows only the correct receiver to decode the data
Question # 70
The instruction register
Select one:

- a. contains the address of the memory location that is to be read from or stored into.
- b. is a hardware memory device which denotes the location of the current instruction being executed.
- c. contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write".
- d. is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.

The correct answer is: is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.

Question #71

Poor response times are caused by

Select one:

- a. High paging rates
- b. Any of the choices
- c. Processor busy
- d. High I/O rate

The correct answer is: Any of the choices

Question # 72

Which of the following are(is) Language Processor(s)

- a. assembles
- b. all of the choices

- c. compilers
- d. interpreters

The correct answer is: all of the choices

Question #73

System maintenance:

## Select one:

- a. is usually not necessary
- b. is not required if the system is well written
- c. always requires several programs
- d. is necessary on all systems, regardless of how good The correct answer is: is necessary on all systems, regardless of how good

Question #74

Which of the following command(s) is/are used to reboot a Linux system?

Select

one: a.

reboot

- ь. all options are correct
- c. init 6
- d. shutdown -h

The correct answer is: all options are correct

Question #75

What is the name given to the software which can be legally compiled and often used for free?

## Select one:

- a. Firmware program
- b. Mindware
- c. Public domain program
- d. Shareware program

The correct answer is: Public domain program

Question #76

Which of the following capabilities is required for a system program to execute more than one program at a time?

## Select one:

- a. compiling
- ь. multitasking
- c. virtual memory
- d. word processing

The correct answer is: multitasking

Question #77

Which of the following OS is not based on Linux?

## Select

one: a.

## **BSD**

- ь. **Ubuntu**
- c. CentOS
- d. Redhat

The correct answer is: BSD

Question # 78

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

# Select one:

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

The correct answer is: cooperating process

Question #79

The process of transferring data intended for a peripheral device into a disk (or intermediate store) so that it can be transferred to peripheral at a more convenient time or in bulk, is known as

- a. multiprogramming
- b. virtual programming

- c. spooling
- d. caching

The correct answer is: spooling

Question #80

The physical layer of a network

#### Select one:

- a. controls error detection and correction
- b. constructs packets of data and sends them across the network
- c. all of the choices
- d. defines the electrical characteristics of signals passed between the computer and communication devices

The correct answer is: defines the electrical characteristics of signals passed between the computer and communication devices

Question #81

Round robin scheduling falls under the category of :

## Select one:

- a. Non preemptive scheduling
- b. Preemptive scheduling
- c. Non preemptive scheduling & Preemptive scheduling

The correct answer is: Preemptive scheduling

Question #82

Bootstrap program is known as firmware

Select one:

True

False

The correct answer is 'True'.

Question #83

In a multiprogramming environment:

#### Select one:

- a. a single user can execute many programs at the same time
- b. the processor executes more than one process at a time
- c. more than one process resides in the memory
- d. the programs are developed by more than one person

The correct answer is: more than one process resides in the memory

Question #84

Multiprogramming

- a. allows multiple programs to reside in separate areas of core at the time.
- b. consists of those addresses that may be generated by a processor during execution of a computation.
- c. is a method of allocating processor time.

d. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.
The correct answer is: allows multiple programs to reside in separate areas of core at the time.
Question # 85
Which of the following is not true about the memory management?
Select one:
a. paging suffers from internal fragmentation
ь. segmentation suffers from external fragmentation
c. segmented memory can be paged
d. virtual memory is used only in multi-user systems
The correct answer is: virtual memory is used only in multi-user systems
Question # 86
A process is a program in execution
Select one:
True
False
The correct answer is 'True'.
Question # 87

Mutual exclusion can be provided

by the Select one:

- a. binary semaphores
- b. both mutex locks and binary semaphores
- c. mutex locks

The correct answer is: both mutex locks and binary semaphores

Question #88

Which of the following are TRUE for Direct Inter-Process Communication:

#### Select one:

- a. A communication link can be associated with exactly two processes
- b. Exactly two link exists between each pair of processes
- c. Exactly N/2 links exist between each pair of processes(N = max. number of processes supported by system)
- d. A communication link can be associated with N number of process(N = max. number of processes supported by system)

The correct answer is: A communication link can be associated with exactly two processes

Question #89

Multiprogramming systems:

- a. execute more jobs in the same time period
- b. are easier to develop than single programming system

- c. execute each job faster
- d. are used only on large mainframe computers

The correct answer is: execute more jobs in the same time period Question # 90

A monitor is a module that encapsulates

## Select one:

- a. shared data structures
- b. synchronization between concurrent procedure invocation
- c. all of the mentioned
- d. procedures that operate on shared data structure

The correct answer is: all of the mentioned

Question #91

The principles of structured programming forbid the use of

#### Select one:

- a. IF-THEN-ELSE
- b. WHILE-DO
- c. DO-WHILE
- d. GOTO

The correct answer is: GOTO

## Question # 92

The switching of the CPU from one process or thread to another is called:

## Select one:

- a. When a process goes from the running state to the waiting state
- b. When a process switches from the waiting state to the ready state
- c. When a process switches from the running state to the ready state
- d. All of the mentioned

The correct answer is: All of the mentioned

Question #93

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

Select

one: a.

fork

- b. exit
- c. get
- d. wait

The correct answer is: wait

Question #94

The advantage of a command processor running only built-in commands is:

## Select one:

- a. the command set being common across different hardware configurations
- b. the processing is much faster than would other-wise be the case when user defined commands are used
- c. users can create system programs and run them as commands
- d. flexibility to the users in running lists of commands by simply collecting them in named batch command files

The correct answer is: the command set being common across different hardware configurations Question # 95

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

## Select one:

- a. ready queue
- ь. job queue
- c. execution queue
- d. process queue

The correct answer is: ready queue

Question #96

Which of the following is a phase of a compilation process?

- a. Code generation
- b. Lexical analysis

- c. Lexical analysis AND Code generation
- d. Static analysis

The correct answer is: Lexical analysis AND Code generation

Question #97

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

## Select one:

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

The correct answer is: all of the choices

Question #98

A process can be terminated due to

#### Select one:

- a. fatal error
- b. normal exit
- c. killed by another process
- d. all of the choices are correct

The correct answer is: all of the choices are correct

## Question #99

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

## Select one:

- a. uniprogramming systems
- b. unitasking systems
- c. uniprocessing systems

The correct answer is: uniprocessing systems

Question # 100

In an absolute loading scheme, which loader function is accomplished by loader

# Select one:

- a. Allocation
- ь. Linking
- c. Loading
- d. Reallocation

The correct answer is: Loading

Question # 101

The primary purpose of an operating system is to:

## Select one:

a. make computer easier to use

- b. keep system programmers employed
- c. make the most efficient use of the hardware
- d. allow people to sue the computers

The correct answer is: make computer easier to use

Question # 102

A process stack does not contain

## Select one:

- a. Return addresses
- b. Function parameters
- c. PID of child process
- d. Local variables

The correct answer is: PID of child process

Question # 103

Cascading termination refers to termination of all child processes before the parent terminates \_\_\_\_\_

#### Select one:

- a. Normally
- ь. Abnormally

The correct answer is: Normally

Question # 104

What is a long-term scheduler?

## Select one:

- a. It selects which process to remove from memory by swapping
- b. It selects which process has to be brought into the ready queue
- c. It selects which process has to be executed next and allocates CPU

The correct answer is: It selects which process has to be brought into the ready queue Question # 105

Which of the following command is used to count number of lines in a file in Linux?

## Select

one: a.

WC -W

b. *WC -C* 

c. WC -1

The correct answer is: wc -l

Question # 106

In Linux, what command is used to remove files?

Select

one: a.

erase

ь. delete

c. *rm* d. *dm* 

The correct answer is: rm

Question # 107

Which is a permanent database in the general model of compiler?

# Select one:

- a. Source code
- ь. Identifier Table
- c. Terminal Table
- d. Literal Table

The correct answer is: Terminal Table

Question # 108

Object modules generated by assemblers that contain unresolved external references are resolved for two or more object modules by a/an

## Select one:

- a. compiler
- b. operating system
- c. linker
- d. loader

The correct answer is: linker

Question # 109
A file system must be mounted before it can be accessed
Select one:
True
False
The correct answer is 'True'.
Question # 110
The practice of "bundling" refers to
Select one:
a. selling peripheral devices with computer
b. selling computers alone
c. selling software to run on computers
d. giving away software with a computer purchase
The correct answer is: giving away software with a computer purchase
Question # 111
Claim edge converts to request edge when a process requests a
resource
Select one:
True
False

The correct answer is 'True'.

## Question # 112

In Linux, which among the following interacts directly with system hardware?

Sele	ect
------	-----

one: a.

Kernel

- b. Commands
- c. Shell
- d. Applications

The correct answer is: Kernel

Question # 113

A solution to the problem of indefinite blockage of low – priority processes is :

# Select one:

- a. Starvation
- b. Wait queue
- c. Aging
- d. Ready queue

The correct answer

is: Aging Question

# 114 in CPU

Scheduling, 'aging'

is

# Select one:

- a. keeping track of how many times a given page is referenced
- b. increasing the priority of jobs to ensure termination in a finite time
- c. keeping track of cache contents
- d. keeping track of what pages are currently residing in memory

The correct answer is: increasing the priority of jobs to ensure termination in a finite time

Question # 115

In Linux environment, at start of process execution, STDOUT & STDERR

#### Select one:

- a. Point to special files on the system
- b. Point to current terminal device
- c. Are closed

The correct answer is: Point to current terminal device

Question # 116

The only state transition that is initiated by the user process itself is :

Select

one: a.

aispatc
h
b. <i>wakeup</i>
c. <i>block</i>
The correct answer is: block
Question # 117
The technique, for sharing the time of a computer among several jobs. Which switches jobs so rapidly such that each job appears to have the computer to itself:
Select
one: a.
time
out
b. <i>time domain</i>
c. time sharing
d. <i>FIFO</i>
<del></del>
The correct answer is: time sharing
Question # 118
The address of the next instruction to be executed by the current process is provided by the
Select one:

a. Program counter

- b. CPU registers
- c. Process stack
- d. Pipe

The correct answer is: Program counter

Question # 119

Part of a program where the shared memory is accessed and which should be executed invisibly, is called

## Select one:

- a. semaphores
- ь. directory
- c. critical section
- d. mutual exclusion

The correct answer is: critical section

Question # 120

An incremental backup

- a. should be done each month
- b. uses more tapes
- c. saves only files that have recently changed
- d. saves all files

The correct answer is: saves only files that have recently changed

Question # 121

A partitioned data set is most used for

#### Select one:

- a. storing program data
- b. storing ISAM files
- c. storing backup information
- d. a program or source library

The correct answer is: a program or source library

Question # 122

How can you add Amit, a new user, to your system?

#### Select one:

- a. Using useradd
- b. Using adduser
- c. All of the choices
- d. Using linuxconf

The correct answer is: All of the choices

Question # 123

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

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

The correct answer is: currently running process

Question # 124

Relocation bits used by relocating loader are specified (generated) by

## Select one:

- a. Relocating loader itself
- b. Macro processor
- c. Assembler or translator
- d. Linker

The correct answer is: Linker

Question # 125

One of the disadvantages of the priority scheduling algorithm is that :

- a. it schedules in a very complex manner
- b. it can lead to some low priority process waiting indefinitely for the CPU
- c. its scheduling takes up a lot of time

The correct answer is: it can lead to some low priority process waiting indefinitely for the CPU Question # 126

What is a medium-term scheduler?

#### Select one:

- a. It selects which process to remove from memory by swapping
- b. It selects which process has to be executed next and allocates CPU
- c. It selects which process has to be brought into the ready queue

The correct answer is: It selects which process to remove from memory by swapping

Question # 127

An I/O bound program will typically have:

## Select one:

- a. a few very short CPU bursts
- ь. many very short CPU bursts
- c. many very short I/O bursts
- d. a few very short I/O bursts

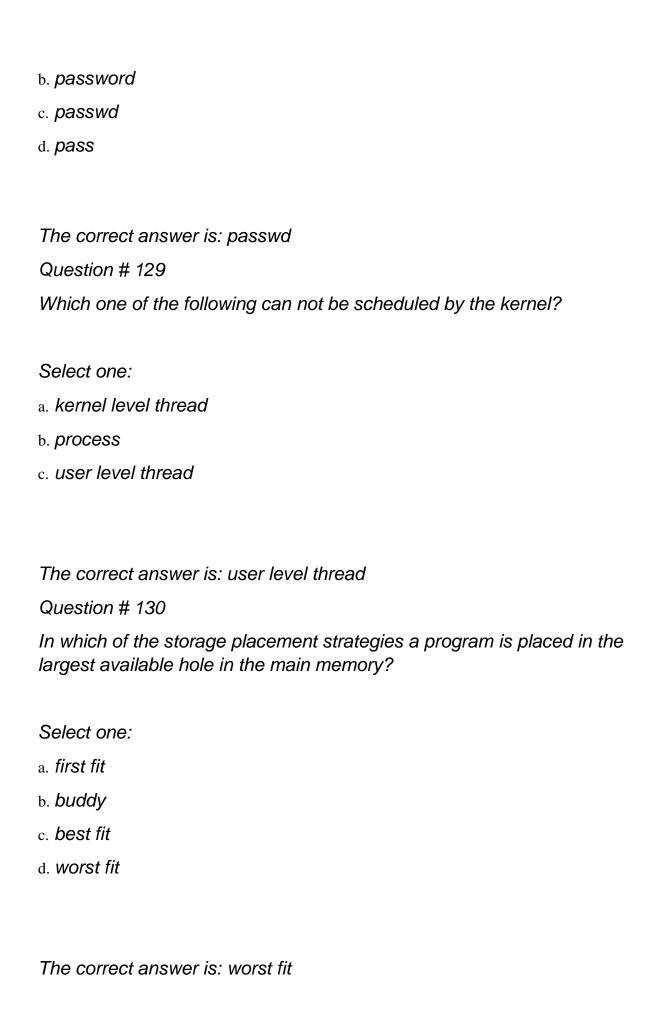
The correct answer is: many very short CPU bursts

Question # 128

Which command is used to change password of your Linux system?

#### Select one:

a. change -p



Question # 131	
A parent process calling children processes terminate.	system call will be suspended until
Select	
one: a.	
exit	
b. <i>fork</i>	
c. wait	
d. <b>exec</b>	

The correct answer is: wait

Question # 132

The higher versions of the operating systems are so written that programs designed for earlier versions can still be run. What is it called?

## Select one:

- a. Upward compatibility
- b. *Universality*
- c. Upward mobility
- d. Upgradability

The correct answer is: Upward compatibility

Question # 133

The part of machine level instruction, which tells the central processor what has to be done, is

Select one:
a. Operation code
ь. Flip-Flop
c. Locator
d. Address
The correct answer is: Operation code
Question # 134
What scheduling algorithm allows processes that are logical runnable to be temporarily suspended?
Select
one: a.
FIFO
b. FCFS
c. preemptive scheduling
d. non-preemptive scheduling
The correct answer is: preemptive scheduling
Question # 135

a. a hardware component

A translator is best described as

b. a system software

- c. an application software
- d. all of the above

The correct answer is: a system software

Question # 136

If a process is executing in its critical section, then no other processes can be executing in their critical section. This condition is called

#### Select one:

- a. critical exclusion
- b. mutual exclusion
- c. asynchronous exclusion
- d. synchronous exclusion

The correct answer is: mutual exclusion

Question # 137

When the process issues an I/O request:

#### Select one:

- a. It is placed in an I/O queue
- ь. It is placed in the Job queue
- c. It is placed in a waiting queue
- d. It is placed in the ready queue

The correct answer is: It is placed in an I/O queue

## Question # 138

Which, of the following, is true for testing and debugging?

#### Select one:

- a. Testing checks for logical errors in the programs, while debugging is a process of correcting those errors in the program
- b. Testing detects the syntax errors in the program while debugging corrects those errors in the program
- c. Testing and debugging indicate the same thing

The correct answer is: Testing checks for logical errors in the programs, while debugging is a process of correcting those errors in the program

Question # 139

Which of the following might be used to convert high-level language instructions into machine language?

## Select one:

- a. system software
- b. an operating environment
- c. applications software
- d. an interpreter

The correct answer is: an interpreter

Question # 140

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

- a. Assembly instructions
- b. System calls
- c. Library
- d. API

The correct answer is: System calls

Question # 141

In an absolute loading scheme, which loader function is accomplished by assembler.

#### Select one:

- a. Reallocation
- ь. *Linking*
- c. Loading
- d. Allocation

The correct answer is: Reallocation

Question # 142

The main function of the dispatcher (the portion of the process scheduler) is

- a. assigning ready process to the CPU
- b. suspending some of the processes when the CPU load is high
- c. bring processes from the disk to the main memory

d. swapping a process to the disk

The correct answer is: assigning ready process to the CPU

Question # 143

Network File System (NFS) is a common distributed file-sharing method

Select one:

True

False

The correct answer is 'True'.

Question # 144

The main function of the command interpreter is

#### Select one:

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

The correct answer is: to get and execute the next user-specified command

Question # 145

In Linux, what command is used to remove the directory?

# Select one: a. rd b. rmdir c. rdir d. remove The correct answer is: rmdir Question # 146 With MS-DOS which command will divide the surface of the blank floppy disk into sectors and assign a unique address to each one? Select one: a. CHKDSK command ь. VER command c. FORMAT command d. FAT command The correct answer is: FORMAT command Question # 147 A system program that combines the separately compiled modules of a program into a form suitable for execution Select one: a. cross compiler

b. load and go

- c. assembler
- d. linking loader

The correct answer is: linking loader

Question # 148

What is the purpose of 'touch' command?

## Select one:

- a. It makes a new directory
- b. It displays the content of a file
- c. It creates a new empty file
- d. It updates the timestamp of an already existing file

The correct answer is: It creates a new empty file

Question # 149

The system calls in UNIX is written using which language

#### Select one:

- a. Assembly Language
- b. Fortran
- c. C
- d. C++

The correct answer is: C

## Question # 150

In which addressing mode the effective address of the operand is the contents of a register specified in the instruction and after accessing the operand, the contents of this register is incremented to point to the next item in the list?

# Select one:

- a. index addressing
- b. indirect addressing
- c. auto increment
- d. auto decrement

The correct answer is: auto increment

Question # 151

The most common systems security method is

Select

one: a.

firewall

- b. passwords
- c. encryption

The correct answer is: passwords

Question # 152

Which of the following is not true about documentation?

- a. Documentation gives better understanding of the problem
- b. Documentation, of a system, should be as clear and direct as possible
- c. Documentation increases the maintenance time and cost

The correct answer is: Documentation increases the maintenance time and cost

Question # 153

A program that converts a high-level language program to a set of instructions that can run on a computer is called a

## Select one:

- a. Compiler
- b. *Editor*
- c. Debugger

The correct answer is: Compiler

Question # 154

Daisy chain is a device for

- a. interconnecting a number of devices to a number of controllers
- b. connecting a number of devices to a controller
- c. connecting a number of controllers to a device

The correct answer is: connecting a number of devices to a controller

Question # 155

A non-relocatable program is one which

Select one:

a. consists of a program and relevant information for its relocation.

ь. all of the choices

c. can itself performs the relocation of its address-sensitive portions.

d. cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation.

The correct answer is: cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation.

Question # 156

The operating system of a computer serves as a software interface between the user and

Select

one: a.

memor

У

b. screen

c. hardware

d. peripheral

The correct answer is: hardware

#### Question # 157

# The dispatcher

#### Select one:

- a. puts tasks in I/O wait
- b. is always small and simple
- c. actually schedules the tasks into the processor
- d. never changes task priorities

The correct answer is: actually schedules the tasks into the processor

Question # 158

Which one of the following is not true?

#### Select one:

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

The correct answer is: kernel is made of various modules which can not be loaded in running operating system

Question # 159

What is a short-term scheduler?

- a. It selects which process to remove from memory by swapping
- b. It selects which process has to be executed next and allocates CPU
- c. It selects which process has to be brought into the ready queue

The correct answer is: It selects which process has to be executed next and allocates CPU

Question # 160

Which module gives control of the CPU to the process selected by the short-term scheduler?

#### Select one:

- a. scheduler
- ь. dispatcher
- c. interrupt

The correct answer is: dispatcher

Question # 161

The primary job of the operating system of a computer is to

- a. manage resources
- b. be user friendly
- c. provide utilities
- d. command resources

The correct answer is: manage resources

Question # 162

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

## Select one:

- a. Device Queue
- b. Process control block (PCB) queue
- c. Ready Queue
- d. Job Queue

The correct answer is: Process control block (PCB) queue

Question # 163

Scheduling is

#### Select one:

- a. allowing jobs to use the processor
- b. unrelated to performance consideration
- c. not required in uniprocessor systems
- d. the same regard-less of the purpose of the system

The correct answer is: allowing jobs to use the processor

Question # 164

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

- a. first-come, first-served scheduling
- b. shortest job scheduling
- c. priority scheduling

The correct answer is: first-come, first-served scheduling

Question # 165

In which addressing mode the contents of a register specified in the instruction are first decremented, and then these contents are used as the effective address of the operands?

#### Select one:

- a. index addressing
- b. auto increment
- c. auto decrement
- d. indirect addressing

The correct answer is: auto decrement

Question # 166

Which of the following statements is not true about the FORTRAN language?

- a. FORTRAN is a high level language
- b. A FORTRAN program, written for the IBM-PC, is totally different from a FORTRAN program written for execution on the SUN machine

c. FORTRAN is extensively used to write programs for performing scientific computations

The correct answer is: A FORTRAN program, written for the IBM-PC, is totally different from a FORTRAN program written for execution on the SUN machine

Question # 167

The principle of locality of reference justifies the use of

#### Select one:

- a. cache memory
- b. reenterable
- c. virtual memory
- d. non reusable

The correct answer is: cache memory

Question # 168

The action of parsing the source program into the proper syntactic classes is known as

- a. general syntax analysis
- b. interpretation analysis
- c. syntax analysis
- d. lexical analysis

The correct answer is: lexical analysis

Question # 169

A program

#### Select one:

- a. is typically characterized by interactive processing and time of the CPU's time to allow quick response to each user.
- b. is a sequence of instructions
- c. is the device where information is stored
- d. is a device that performs a sequence of operations specified by instructions in memory.

The correct answer is: is a sequence of instructions

Question # 170

Inter process communication:

## Select one:

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

The correct answer is: allows processes to communicate and synchronize their actions without using the same address space

Question # 171

Complex scheduling algorithms:

- a. use minimal resources
- b. are very appropriate for very large computers
- c. all of the mentioned
- d. use many resources

The correct answer is: are very appropriate for very large computers

Question # 172

The term 'polling' in a computer means a process by which a computer system

#### Select one:

- a. decides correct alternative by analyzing several ones
- b. inquires to see if a terminal has any transaction to send
- c. multiplexes the inputs and updates the memory accordingly
- d. detects/corrects errors

The correct answer is: inquires to see if a terminal has any transaction to send

Question # 173

Which of following is/are the advantage(s) of modular programming?

- a. The program is much easier to change
- b. Easy debugging

c. Easy to compile
d. Modules can be reused in other programs
The correct answer is: The program is much easier to change
Question # 174
Linux is the best-known and often-used open-source operating system
Select one:
True
False
The correct answer is 'True'.
Question # 175
If all processes I/O bound, the ready queue will almost always be
and the Short term Scheduler will have a to do.
Select
one: a.
full,lot
b. <i>empty,little</i>
c. full,little
d. empty,lot

The correct answer is: empty,little

Question # 176

The two steps of a process execution are:

- a. Memory & I/O Burst
- b. I/O & OS Burst
- c. CPU & I/O Burst
- d. OS & Memory Burst

The correct answer is: CPU & I/O Burst

Question # 177

A form of code that uses more than one process and processor, possibly of different type, and that may on occasions have more than one process or processor active at the same time, is known as

#### Select one:

- a. multi threading
- b. time sharing
- c. broadcasting
- d. multiprogramming

The correct answer is: multi threading

Question # 178

The child process can:

- a. be a duplicate of the parent process
- b. never be a duplicate of the parent process

- c. cannot have another program loaded into it
- d. never have another program loaded into it

The correct answer is: be a duplicate of the parent process

Question # 179

By operating system, the resource management can be done via

## Select one:

- a. none of the choices
- b. space division multiplexing
- c. time division multiplexing
- d. both time and space division multiplexing

The correct answer is: both time and space division multiplexing

Question # 180

Scheduling is:

#### Select one:

- a. making proper use of processor
- ь. allowing a job to use the processor

The correct answer is: allowing a job to use the processor

Question # 181

A task in a blocked state

- a. is waiting for same temporarily unavailable resources
- b. is running
- c. is executable
- d. must still be placed in the run queues

The correct answer is: is waiting for same temporarily unavailable resources

Question # 182

In which addressing mode, the address of the location of the operand is given explicitly as a part of the instruction.

#### Select one:

- a. immediate mode
- ь. absolute mode
- c. modulus mode
- d. index mode

The correct answer is: absolute mode

Question # 183

Software that measures, monitors, analyzes, and controls real-world events is called:

- a. system software
- b. business software

- c. real-time software
- d. scientific software

The correct answer is: real-time software

Question # 184

The state of a process is defined by:

# Select one:

- a. the activity just executed by the process
- b. the current activity of the process
- c. the final activity of the process
- d. the activity to next be executed by the process

The correct answer is: the current activity of the process

Question # 185

What is the name of the operating system which was originally designed by scientists and engineers for use by scientists and engineers?

Select

one: a.

**XENIX** 

- b. OS/2
- c. MS DOS
- d. UNIX

Question # 186
An instruction in a programming language that is replaced by a sequence of instructions prior to assembly or compiling is known as
Select
one: a.
literal
b. <i>label</i>
c. procedure name
d. <i>macro</i>
The correct answer is: macro
Question # 187
The number of processes completed per unit time is known as
Select one:
a. Throughput
b. Capacity
c. Output
d. Efficiency
The correct answer is: Throughput
Question # 188
Orders are processed in the sequence they arrive if rule sequences the jobs.

The correct answer is: UNIX

# Select one:

- a. slack time remaining
- b. critical ratio
- c. first come, first served
- d. earliest due date

The correct answer is: first come, first served

Question # 189

The portion of the process scheduler in an operating system that dispatches processes is concerned with :

#### Select one:

- a. assigning ready processes to CPU
- b. assigning ready processes to waiting queue
- c. assigning running processes to blocked queue
- d. all of the mentioned

The correct answer is: assigning ready processes to CPU

Question # 190

Special software to create a job queue is called a

- a. Interpreter
- b. *Drive*
- c. Spooler
- d. Linkage editor

The correct answer is: Spooler

Question # 191

The CPU, after receiving an interrupt from an I/O device

# Select one:

- a. branches off to the interrupt service routine immediately
- b. halts for a predetermined time
- c. branches off to the interrupt service routine after completion of the current instruction
- d. hands over control of address bus and data bus to the interrupting device

The correct answer is: branches off to the interrupt service routine after completion of the current instruction

Question # 192

A translator which reads an entire programme written in a high level language and converts it into machine language code is:

#### Select one:

- a. compiler
- b. translator
- c. system software
- d. assembler

The correct answer is: compiler

# Question # 193

In Linux, which of the following command is used to know last shutdown/reboot date and time?

shutdown/reboot date and time?
Select one:
a. lastreboot
b. lastshutdown
c. last
d. lastlogin
The correct answer is: last
Question # 194
Which of the following is a measure to test how good or bad a modular design is
Calastana
Select one:
a. Static analysis
b. Module coupling
c. Module strength
The correct answer is: Module strength
Question # 195
Scheduling is done to :

# Select one:

a. increase the throughput

- b. increase the duration of a specific amount of work
- c. decrease the throughput

The correct answer is: increase the throughput

Question # 196

Which of the following system program forgoes the production of object code to generate absolute machine code and load it into the physical main storage location from which it will be executed immediately upon completion of the assembly?

#### Select one:

- a. load-and-go assembler
- b. macroprocessor
- c. two pass assembler
- d. compiler

The correct answer is: load-and-go assembler

Question # 197

In Linux, what file specifies the order in which to use specified name services?

- a. /etc/services
- b. /etc/nsswitch.conf
- c. /etc/nsorder
- d. /etc/hosts

The correct answer is: /etc/nsswitch.conf Question # 198 Which of the following is a block device Select one: a. mouse b. *terminal* c. disk d. *printer* The correct answer is: disk Question # 199 What is the name of the technique in which the operating system of a computer executes several programs concurrently by switching back and forth between them? Select one: a. **Paging** b. Partitioning c. Windowing

The correct answer is: Multitasking

d. Multitasking

# Question #200

The errors that can be pointed out by the compiler are

# Select one:

- a. Internal errors
- b. Syntax errors
- c. Logical errors
- d. Semantic errors

The correct answer is: Syntax errors

Question #201

In Linux, wtmp and utmp files contain:

#### Select one:

- a. The user's command execution log
- b. User login-logout log
- c. Temporary system data
- d. The user's su and sudo attempts

The correct answer is: User login-logout log

Question # 202

In the following case(s) non – preemptive scheduling occurs:

#### Select one:

a. When a process switches from the waiting state to the ready state

- b. When a process goes from the running state to the waiting state
- c. When a process switches from the running state to the ready state
- d. All of the mentioned

The correct answer is: When a process goes from the running state to the waiting state

Question #203

Time quantum is defined in

#### Select one:

- a. multilevel queue scheduling algorithm
- ь. priority scheduling algorithm
- c. round robin scheduling algorithm
- d. shortest job scheduling algorithm

The correct answer is: round robin scheduling algorithm

Question #204

Message passing system allows processes to:

- a. communicate with one another without resorting to shared data
- b. name the recipient or sender of the message
- c. share data
- d. communicate with one another by resorting to shared data

The correct answer is: communicate with one another without resorting to shared data
Question # 205
Which of the following scheduling algorithms gives minimum average waiting time ?
Select
one: a.
SJF
b. FCFS
c. Priority
d. Round – robin
The correct answer is: SJF
Question # 206
With multiprogramming, is used productively.
Select
one: a.
time
b. all of the mentioned
c. money
d. space

The correct answer is: time

Question # 207

The total time to prepare a disk drive mechanism for a block of data to be read from it is

#### Select one:

- a. latency plus seek time
- b. latency plus seek time plus transmission time
- c. latency
- d. latency plus transmission time

The correct answer is: latency plus seek time

Question # 208

An Inter Process Communication (IPC) facility provides at least two operations:

# Select one:

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

The correct answer is: receive & send message

Question #209

Virtual Memory

a. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks. b. is a method of allocating processor time.

c. consists of those addresses that may be generated by a processor during execution of a computation.

d. allows multiple programs to reside in separate areas of core at the

time.

The correct answer is: consists of those addresses that may be generated by a processor during execution of a computation. Question #210

Suppose that a process is in "Blocked" state waiting for some I/O service. When the service is completed, it goes to the :

# Select one:

- a. Terminated state
- ь. Running state
- c. Suspended state
- d. Ready state

The correct answer is: Ready state

Question #211

Which of the following systems software does the job of merging the records from two files into one?

#### Select one:

a. Security software

- ь. Utility program
- c. Documentation system
- d. Networking software

The correct answer is: Utility program

Question #212

Which is not true about an interpreter?

# Select one:

- a. Interpreter analyses each source statement every time it is to be executed
- b. Interpreter is a kind of translator
- c. Interpreter generates an object program from the source program

The correct answer is: Interpreter generates an object program from the source program

Question #213

In Linux, what command is used with vi editor to delete a single character?

Select one: a	69
b	69
C	69

The correct answer is: x

Question #214

Addressing modes

# Select one:

- a. defines the fundamental method of determining effective operand addresses b. all of the choices
- c. performs indicated operations on two fast registers of the machine and leave the result in one of the registers.
- d. are variations in the use of fundamental addressing structures, or some associated actions which are related to addressing.

The correct answer is: are variations in the use of fundamental addressing structures, or some associated actions which are related to addressing.

Question #215

While running DOS on a PC, which command would be used to duplicate the entire diskette?

Select

one: a.

**TYPE** 

- b. DISKCOPY
- c. COPY
- d. CHKDSK

The correct answer is: DISKCOPY

# Question #216

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?

# Select one:

- a. tQ = 50ms
- b. tQ = 15ms
- c. tQ = 45ms
- d. tQ = 40ms

The correct answer is: tQ = 15ms

Question #217

Scheduling is done in order to:

# Select one:

- a. decrease CPU utilization
- b. keep the CPU more idle
- c. increase CPU utilization

The correct answer is: increase CPU utilization

Question #218

In a magnetic disk, data is recorded in a set of concentric tracks which are subdivided into

Select
one: a.
periods
b. sectors
c. zones
d. <i>groups</i>
The correct answer is: sectors
Question # 219
A sequence of instructions, in a computer language, to get the desired result, is known as
Select one:
a. Algorithm
ь. Decision Table
c. Program
The correct answer is: Program
Question # 220
With only one process can execute at a time; meanwhile all other process are waiting for the processor. With more than one process can be running simultaneously each on a different processor.
Select one:
a. Uniprogramming, Multiprocessing
ь. Multiprogramming, Uniprocessing

- c. Multiprocessing, Multiprogramming
- d. Multiprogramming, Multiprocessing

The correct answer is: Uniprogramming, Multiprocessing

Question #221

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

\_\_\_\_\_

# Select one:

- a. none of the choices
- b. another running process
- c. new file
- d. log file

The correct answer is: log file

Question # 222

In Linux, what command is used to count the total number of lines, words, and characters contained in a file?

Select

one: a.

count p

- b. **countw**
- c. WCount
- d. WC

The correct answer is: wc

Question # 223

The command interpreter

# Select one:

- a. requires fixed format commands
- b. is usually the primary user interface
- c. is menu drive

The correct answer is: is usually the primary user interface

Question # 224

Page-map table is

# Select one:

- a. All of the choices
- b. A directory
- c. Used for address translation
- d. A data file

The correct answer is: Used for address translation

Question #225

Information in a memory that is no longer valid or wanted is known as

Select
one: a.
volatile
b. garbage
c. non-volatile
d. surplus
The correct answer is: garbage
Question # 226
Logical file system manages metadata information
Select one:
True
False
The correct answer is 'True'.
Question # 227
A relationship between processes such that each has some part (critical section) which must not be executed while the critical section of another is being executed, is known as
Select one:
a. multiprogramming
b. mutual exclusion
c. semaphore
d. <i>multitasking</i>

The correct answer is: mutual exclusion
Question # 228
Ubuntu OS is developed based on Linux kernel
Select one:
True
False
The correct answer is 'True'.
Question # 229
Which of the following program is not a utility?
Select one:
a. Debugger
b. Spooler
c. Editor
The correct answer is: Spooler
Question # 230
Which one of the following is a synchronization tool?
Select
one: a.
pipe
b. socket

- c. thread
- d. semaphore

The correct answer is: semaphore

Question #231

Data encryption

# Select one:

- a. cannot be used by private installations
- b. is mostly used by public networks
- c. is not necessary, since data cannot be intercepted
- d. is mostly used by financial networks

The correct answer is: is mostly used by financial networks

Question #232

A hardware device that is capable of executing a sequence of instructions, is known as

Select

one: a.

ALU

- b. Processor
- c. CPU
- d. CU

The correct answer is: Processor

Question #233

A set of processes is deadlock if

#### Select one:

- a. all processes are trying to kill each other
- b. each process is terminated
- c. each process is blocked and will remain so forever

The correct answer is: each process is blocked and will remain so forever

Question #234

What is the name of the system which deals with the running of the actual computer and not with the programming problems?

# Select one:

- a. Source program
- b. Operating system
- c. Systems program
- d. Object program

The correct answer is: Systems program

Question #235

System programs such as Compilers are designed so that they are

a. reenterable
b. <i>non reusable</i>
c. serially usable
d. recursive
The correct answer is: reenterable
Question # 236
File & directory permissions in Linux are assigned by numerically only
Select one:
True
False
The correct answer is 'False'.
Question # 237
File is an abstract data type
Select one:
True
False
The correct answer is 'True'.
Question # 238
Which of the following algorithms tends to minimize the process flow time?
Select one:

- a. Shortest Job First
- b. First come First served
- c. Earliest Deadline First
- d. Longest Job First

The correct answer is: Shortest Job First

Question #239

A development strategy whereby the executive control modules of a system are coded and tested first, is known as

# Select one:

- a. Bottom-up development
- ь. Left-Right development
- c. All of the choices
- d. Top-down development

The correct answer is: Top-down development

Question #240

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

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

The correct answer is: Old

Question #241

The real difficulty with SJF in short term scheduling is :

#### Select one:

- a. knowing the length of the next CPU request
- b. it is too complex to understand
- c. it is too good an algorithm

The correct answer is: knowing the length of the next CPU request

Question # 242

Which of the following addressing modes, facilitates access to an operand whose location is defined relative to the beginning of the data structure in which it appears?

Select

one: a.

index

- ь. indirect
- c. ascending
- d. sorting

The correct answer is: index

Question # 243

To enable a process to wait within the monitor,

# Select one:

- a. semaphore must be used
- b. a condition variable must be declared as condition
- c. condition variables must be used as boolean objects

The correct answer is: a condition variable must be declared as condition

Question # 244

Which command is used to get the kernel version in Linux?

#### Select one:

- a. uname -r
- b. uname -n
- c. uname -s
- d. kernel

The correct answer is: uname -r

Question # 245

All the time a computer is switched on, its operating system software has to stay in

- a. main storage
- b. disk drive
- c. primary storage

# d. floppy disk

The correct answer is: primary storage

Question #246

What is the name given to the process of initializing a microcomputer with its operating system?

# Select one:

- a. Cold booting
- ь. **Booting**
- c. Warm booting
- d. Boot recording

The correct answer is: Booting

Question #247

Consider the following set of processes, the length of the CPU burst time given in milliseconds:

#### **Processes**

**Burst Time** 

P1 6

P2 8

P3 7

P4 3

Assuming the above process being scheduled with the SJF scheduling algorithm:

# Select one:

- a. The waiting time for process P1 is 0ms
- b. The waiting time for process P1 is 16ms
- c. The waiting time for process P1 is 9ms
- d. The waiting time for process P1 is 3ms

The correct answer is: The waiting time for process P1 is 3ms

Question #248

Preemptive Shortest Job First scheduling is sometimes called:

#### Select one:

- a. HRRN scheduling Highest Response Ratio Next
- b. Fast SJF scheduling
- c. SRTN scheduling Shortest Remaining Time Next
- d. EDF scheduling Earliest Deadline First

The correct answer is: SRTN scheduling – Shortest Remaining Time Next

Question #249

When a resource is released by a process, assignment edge reconverts to a request edge

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True

False

The correct answer is 'False'.

Question #250

The term "operating system" means

#### Select one:

- a. the way a computer operator works
- b. the way a floppy disk drive operates
- c. a set of programs which controls computer working
- d. conversion of high level language into machine code

The correct answer is: a set of programs which controls computer working

Question #251

Which of the following is not applications software?

Select

one: a.

**UNIX** 

- b. Word processing
- c. Desktop publishing
- d. Spreadsheet

The correct answer is: UNIX

Question #252

Which of the following command can be used as an alternative to echo command in Linux?

# Select one: a. print b. printf

c. printr

The correct answer is: printf

Question #253

The function(s) of the Storage Assignment is (are)

#### Select one:

- a. all of the choices
- b. to assign storage to literals, and to ensure that the storage is allocate and appropriate locations are initialized.
- c. to assign storage to all temporary locations that are necessary for intermediate results.
- d. to assign storage to all variables referenced in the source program.

The correct answer is: all of the choices

Question # 254

The disadvantages of "Compile and Go" loading scheme is (are):

- a. a portion of memory is wasted because the core occupied by the assembler is unavailable to the object program.
- b. all of the choices

- c. it is necessary to retranslate the user's program deck every time it is run.
- d. it is very difficult to handle multiple segments, especially if the source programs are in different languages, and to produce orderly modular programs.

The correct answer is: all of the choices

Question #255

The strategy of making processes that are logically runnable to be temporarily suspended is called :

# Select one:

- a. First come First served
- b. Shortest job first
- c. Non preemptive scheduling
- d. Preemptive scheduling

The correct answer is: Preemptive scheduling

Question #256

Memory management is:

- a. replaced with virtual memory on current systems
- b. not used on multiprogramming systems
- c. critical for even the simplest operating systems
- d. not used in modern operating system

The correct answer is: critical for even the simplest operating systems Question #257 Swapping Select one: a. works best with many small partitions b. does not work with overlaying c. allows many programs to use memory simultaneously d. allows each program in turn to use the memory The correct answer is: allows each program in turn to use the memory Question #258 An algorithm is best described as Select one: a. All of the choices

The correct answer is: A step by step procedure for solving a problem

ь. A computer language

Question #259

Select one:

d. A branch of mathematics

The degree of multiprogramming is:

c. A step by step procedure for solving a problem

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

The correct answer is: the number of processes in memory

Question #260

Which of the following is characteristic of an operating system?

#### Select one:

- a. resource management
- b. error recovery
- c. memory management
- d. all of the choices

The correct answer is: all of the choices

Question #261

Assembler is

- a. a program that automate the translation of assembly language into machine language.
- b. is a program that appears to execute a source program as if it were machine language.
- c. a program that accepts a program written in a high level language and produces an object program.

d. a program that places programs into memory and prepares them for execution.

The correct answer is: a program that automate the translation of assembly language into machine language.

Question # 262

Which of the following terms refers to the degree to which data in a database system are accurate and correct?

# Select one:

- a. data validity
- ь. data integrity
- c. data independence
- d. data security

The correct answer is: data integrity

Question #263

Messages sent by a process :

# Select one:

- a. have to be of a fixed size
- b. have to be a variable size
- c. can be fixed or variable sized

The correct answer is: can be fixed or variable sized

Question #264

# Process synchronization can be done on

# Select one:

- a. hardware level
- b. software level
- c. both hardware and software level

The correct answer is: both hardware and software level

Question # 265

Which of the following instruction steps, would be written within the diamond-shaped box, of a flowchart?

# Select

one: a.

IS

A<10

- b. S = B C
- c. PRINT A
- d. DATA X,4Z

The correct answer is: IS A<10

Question # 266

In Linux, which system call creates the new process?

# Select one: a. fork b. new c. create The correct answer is: fork Question #267 The interval from the time of submission of a process to the time of completion is termed as Select one: a. response time b. waiting time c. throughput d. turnaround time The correct answer is: turnaround time Question # 268 A disk scheduling algorithm in an operating system causes the disk arm to move back and forth across the disk surface in order to service all requests in its path. This is a

Select one:

b. FIFO

c. Scan

a. First come first served

# d. Shortest Seek Time First (SSTE)

The correct answer is: Scan

Question # 269

Scissoring enables

### Select one:

- a. entire data to be displayed
- ь. a part of data to be displayed
- c. full data display on full area of screen
- d. no data to be displayed

The correct answer is: a part of data to be displayed

Question #270

What is operating system?

### Select one:

- a. All of the choices
- ь. Link to interface the hardware and application programs
- c. Collection of programs that manages hardware resources
- d. System service provider to the application programs

The correct answer is: All of the choices

Question #271

Linux terminal is casesensitive Select one: True False

The correct answer is 'True'.

Question #272

An SJF algorithm is simply a priority algorithm where the priority is :

### Select one:

- a. the current CPU burst
- b. the predicted next CPU burst
- c. anything the user wants
- d. the inverse of the predicted next CPU burst

The correct answer is: the predicted next CPU burst

Question #273

The SJF algorithm executes first the job

- a. with the least processor needs
- b. that last entered the queue
- c. that has been in the queue the longest
- d. that first entered the queue

The correct answer is: with the least processor needs

Question #274

The advantage(s) inherent to using high level languages is (are)

#### Select one:

- a. Improved debugging capability, and superior documentation
- b. Fewer people, less management and shorter transition in learning time
- c. A greater degree of machine independence
- d. All of the choices

The correct answer is: All of the choices

Question #275

Which of the following filename extension suggests that the file is a backup copy of another file?

Select

one: a.

BAK

- b. COM
- c. TXT
- d. BAS

The correct answer is: BAK

Question #276

Bug means

# Select one:

- a. Documenting programs using an efficient documentation tool
- b. All of the choices
- c. A difficult syntax error in a program
- d. A logical error in a program

The correct answer is: A logical error in a program

Question #277

Which of the following are loaded into main memory when the computer is booted?

#### Select one:

- a. utility programs
- b. word processing instructions
- c. external command instructions
- d. internal command instructions

The correct answer is: internal command instructions

Question #278

Under virtual storage,

- a. only the active pages of a program are stored in primary storage
- ь. a single program is processed by two or more CPUs
- c. two or more programs are stored concurrently in primary storage
- d. interprogram interference may occur

The correct answer is: only the active pages of a program are stored in primary storage

Question #279

The function(s) of the Syntax phase is(are)

### Select one:

- a, to build a literal table and an identifier table
- b. to recognize the major constructs of the language and to call the appropriate action routines that will generate the intermediate form or matrix for these constructs. c. to build a uniform symbol table

d. to parse the source program into the basic elements or tokens of the language.

The correct answer is: to recognize the major constructs of the language and to call the appropriate action routines that will generate the intermediate form or matrix for these constructs.

Question # 280

Which directory in Linux contains all the config file of the system?

### Select

one: a.

/bin

- b. /lib
- c. /var
- d. /etc

The correct answer is: /etc

Question #281

A linker

### Select one:

- a. is not necessary with variable partitions
- b. must be run after the loader
- c. creates a load module
- d. is not needed with a good compiler

The correct answer is: creates a load module

Question # 282

**Paging** 

- a. is a method of allocating processor time.
- b. consists of those addresses that may be generated by a processor during execution of a computation.
- c. is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.
- d. allows multiple programs to reside in separate areas of core at the time.

The correct answer is: is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.

Question #283

What is interprocess communication?

#### Select one:

- a. communication within the process
- b. communication between two threads of same process
- c. communication between two process

The correct answer is: communication between two process

Question #284

A self-relocating program is one which

### Select one:

- a. consists of a program and relevant information for its relocation.
- b. cannot be made to execute in any area of storage other than the one designated for it at the time of its coding or translation.
- c. can itself performs the relocation of its address-sensitive portions.

The correct answer is: can itself performs the relocation of its addresssensitive portions.

Question # 285

Kernel is the most important part of every operating system

True
False
The correct answer is 'True'.
Question # 286
Pthread API is OS-independent
Select one:
True
False
The correct answer is 'True'.
Question # 287
Which of the following command is used to create file in Linux?
Select
one: a.
touch
b. <i>echo</i>
c. all of the choices are correct
d. cat
The correct answer is: all of the choices are correct
Question # 288

The primary distinction between the short term scheduler and the long

term scheduler is:

### Select one:

- a. The frequency of their execution
- ь. The length of their queues
- c. The type of processes they schedule

The correct answer is: The frequency of their execution

Question #289

Solaris is the name of a flavor of UNIX from

## Select one:

- a. Digital Equipment Corp
- b. *HP*
- c. IBM
- d. Sun Microsystems

The correct answer is: Sun Microsystems

Question #290

Access time is the highest in the case of

- a. swapping devices
- b. floppy disk
- c. magnetic disk
- d. cache

The correct answer is: magnetic disk

Question #291

Scheduling is done so as to :

### Select one:

- a. keep the turnaround time same
- b. decrease the turnaround time
- c. there is no relation between scheduling and turnaround time
- d. increase the turnaround time

The correct answer is: decrease the turnaround time

Question #292

Two basic types of operating systems are:

#### Select one:

- a. sequential and real-time
- b. sequential and direct
- c. batch and interactive
- d. batch and timesharing

The correct answer is: batch and interactive

Question #293

A compiler for a high-level language that runs on one machine and produces code for a different machine is called is

Select one:						
a. optimizing compiler						
b. multipass compiler						
c. cross compiler						
d. one pass compiler						
The correct answer is: cross compiler						
Question # 294						
Device driver controls the logical device						
Select one:						
True						
False						
The correct answer is 'False'.						
Question # 295						
Dispatch latency is :						
Select one:						
a. the time of dispatching a process from running to ready state and keeping the CPU idle						
b. the time to stop one process and start running another one						
c. the speed of dispatching a process from running to the ready state						

The correct answer is: the time to stop one process and start running another one

# Question # 296

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

Select
one: a.
DAdd
b. DLocate
c. <i>DMap</i>
d. DTrace
The correct answer is: DTrace
Question # 297
Under multiprograming, turnaround time for short jobs is usuallyand that for long jobs is slightly
Select one:
a. lengthened; lengthened
b. lengthened; shortened
c. shortened; lengthened
d. shortened; shortened

The correct answer is: shortened; lengthened

Question #298

What is the name of the operating system that reads and reacts in terms of actual time?

### Select one:

- a. Quick response system
- b. Time sharing system
- c. Real time system
- d. Batch system

The correct answer is: Real time system

Question # 299

With virtualization software, computer users can work with 2 operating systems simultaneously Select one:

True

False

The correct answer is 'True'.

Question # 300

What is the name given to all the programs inside the computer with makes it usable?

### Select one:

- a. Firmware
- b. Application software
- c. Shareware
- d. System software

The correct answer is: System software