

Prerequisite Quiz: Operating Systems

1. Spooling is
 - (A) the rewinding of tapes after processing
 - (B) the temporary storage and management of output to printers and other output devices until they can cope with it
 - (C) the recording of all user activities in a log file
 - (D) None of the above
2. One function of an operating system is to handle interrupts. Interrupts are
 - (A) a delay in processing due to operating system overload
 - (B) signals from hardware or software requesting attention from the operating system
 - (C) messages received from other computers
 - (D) None of the above
3. An operating system with multiprogramming capability is one that
 - (A) allows several users to use the same program at once by giving each a slice of time
 - (B) loads several independent processes into memory and switches the CPU from one job to another as required
 - (C) runs programs over more than one processor
 - (D) None of the above
4. Where does swap space reside?
 - (A) RAM
 - (B) ROM
 - (C) Disk
 - (D) On-chip cache
5. Which of the following programs always resides in memory?
 - (A) Loader
 - (B) Linker
 - (C) Assembler
 - (D) All of the above
6. Which of the following is a must to be able to run a multiuser OS?
 - (A) Virtual Memory
 - (B) Swap space
 - (C) Disk
 - (D) A hardware mode bit for protection
7. Match the operating system abstractions in the left column to the hardware components in the right column
 - a. Thread
 - b. Virtual Address Space
 - c. File System
 - d. Signal
 1. Interrupt
 2. Memory
 3. CPU
 4. Disk

- (A) a-2, b-4, c-3, d-1
 - (B) a-1, b-2, c-3, d-4
 - (C) a-3, b-2, c-4, d-1
 - (D) a-4, b-2, c-2, d-1
8. Object modules generated by assemblers may contain unresolved references. These are resolved using other object modules by the
- (A) linker
 - (B) loader
 - (C) debugger
 - (D) compiler
9. The computer itself uses _____ language.
- (A) High level
 - (B) Natural
 - (C) Assembly
 - (D) Machine
10. Which of the following file streams is NOT opened automatically in a UNIX program?
- (A) Standard input
 - (B) Standard output
 - (C) Standard error
 - (D) Standard terminal
11. Transfer of information to and from main memory takes place in terms of
- (A) bits
 - (B) bytes
 - (C) words
 - (D) nibbles
12. Virtual Memory
- (A) is an extremely large main memory
 - (B) is an extremely large secondary memory
 - (C) allows execution of processes that may not be completely in memory
 - (D) is a type of memory used in supercomputers
13. Page fault occurs when
- (A) the page is corrupted by application software
 - (B) the page is in main memory
 - (C) the page is not in main memory
 - (D) one tries to divide a number by 0
14. When an interrupt arrives, the operating system
- (A) ignores the interrupt

- (B) always changes the state of interrupted process after processing the interrupt
 - (C) always resumes execution of the interrupted process after processing the interrupt
 - (D) may change the state of the interrupted process to blocked and schedule another process
15. Which of the following is NOT an advantage provided by shared libraries?
- (A) They save disk space
 - (B) They save space in main memory
 - (C) Multiple versions of the same library can be loaded into main memory
 - (D) None of the above
16. A 1000 MB hard disk has 512-byte sectors. Each track on the disk has 1000 sectors. The number of tracks on the disk is
- (A) 1024
 - (B) 2048
 - (C) 512
 - (D) 1000
17. System calls are invoked by using
- (A) software interrupt
 - (B) polling
 - (C) indirect jump
 - (D) a privileged instruction
18. Which of the following is NOT a solution for the critical section problem?
- (A) Monitor
 - (B) Semaphore
 - (C) Segmentation
 - (D) Critical Region construct
19. Which of the following is NOT a necessary condition for a deadlock?
- (A) Mutual Exclusion
 - (B) Circular wait
 - (C) No preemption of resources
 - (D) None of the above
20. Which of the following statements is FALSE in the context of web servers and application servers?
- (A) Web servers in general send html pages to browsers as their primary function.
 - (B) Web servers execute scripts such as Javascript, VBScript.
 - (C) Web servers are capable of applying business logic.
 - (D) An application server supplies material to the webserver by applying business logic.

End of the question paper

Answers

1. B
2. B
3. B
4. C
5. A
6. D
7. C
8. A
9. D
10. D
11. C
12. C
13. C
14. D
15. D
16. B
17. A
18. C
19. D
20. C