

Operating Systems Fundamentals.

Lesson 1. Quiz. Answers

- 1 - **What characterizes an Operating System the most?**
 - a) **System calls**
 - b) Command interpreter
 - c) The shell
 - d) Commands
- 2 - **What information about a file is NOT returned in the struct stat by the STAT call?**
 - a) The file size
 - b) **The name of the file**
 - c) The type of file
 - d) The date of the last access to the file.
- 3 - **What service ends the execution of a process?**
 - a) return
 - b) end
 - c) finish
 - d) **exit**
- 4 - **Which service duplicates the process that invokes the call**
 - a) exec
 - b) clone
 - c) **fork**
 - d) creat
- 5 - **What descriptor predefines standard output?**
 - a) 0
 - b) **1**
 - c) 2
 - d) 3
- 6 - **What service allows to create a file**
 - a) mkfile
 - b) read
 - c) touch
 - d) **creat**
- 7 - **Which service allows to modify the attributes for an open file**
 - a) **fnclt**
 - b) chmod
 - c) attribute
 - d) fstat
- 8 - **How does a microkernel tell a handler that an interrupt has occurred?**
 - a) Using a shared variable.
 - b) **A message.**
 - c) A semaphore
 - d) A condition variable
- 9 - **The UNIX operating system has a structure**
 - a) Layered
 - b) virtual machines
 - c) **Monolithic**
 - d) Client-Server
- 10 - **What system call can be invoked with a variable number of arguments?**
 - a) fork
 - b) write

- c) creat
 - d) **None of them**
- 11 - **What is false about the EXEC system call?**
- a) Change the memory image of a process
 - b) Allows passing arguments to the called program
 - c) **Change the identifier of the process**
 - d) Keeps descriptors open.
- 12 - **What feature is not a requirement of an OS's memory management system?**
- a) relocation
 - b) sharing
 - c) memory allocation
 - d) **Virtual to physical address translation.**
- 13 - Choose the correct statement related to the bootstrap program:
- a) Typically stored in the RAM, generally known as firmware.
 - b) It is loaded only in the reboot.
 - c) Loads the operating system the kernel and the user applications
 - d) **None of the above.**
- 14 - Where does the OS load a program before executing it?
- a) EPROM
 - b) ROM
 - c) **RAM**
 - d) Any Storage Device.
- 15 - What do we understand as a trap when referring to operating system operations?
- a) An infinite loop from which you cannot exit.
 - b) A section of code which is not performing as intended.
 - c) A request from the user program.
 - d) **None of the above**
- 16 - Which are the main advantages of the usage of multiprocessor systems?
- a) Less throughput, more reliability, less cost.
 - b) **Greater throughput**
 - c) Greater throughput, easier to implement, less cost.
 - d) None of the above.
- 17 - Which one of the following can be considered part of the operating system?
- a) **kernel and file manager**
 - b) kernel and web browser
 - c) file manager without kernel
 - d) none of the above
- 18 - Which of the following tasks is performed by the kernel?
- a) Memory management.
 - b) Scheduling tasks for the CPU to run.
 - c) File management.
 - d) **All previous answers are correct.**
- 19 - Select the correct statement about the bootstrap:
- a) **It is the program loaded at the startup of the computer that initializes the operating system.**
 - b) It is located in a random address in the main memory of the computer.
 - c) It is a program that determines the type of interrupt in the interrupt handling process.
 - d) It is always saved in a SRAM
- 20 - Which one of the following definition describes a program correctly:
- a) a program is the same as a process
 - b) a program is an active entity being executed in the cpu
 - c) **a program is a passive entity stored in files**

d) a program contains only one process