

Quiz 1

When an event occurs:

- a) The mode is changed to kernel mode and a context switch is executed
- b) The mode is changed to kernel mode and there is no context switch
- c) The mode is changed to kernel mode and a context switch is performed only if a different process is waiting for the event to happen.
- d) The mode is not changed and there is no context switch until a handler is loaded.

Quiz 2

In what order does the event manager execute?

- a) Save CPU state to stack, Run event handler routine, Return to previous state
- b) Switch to Kernel mode, Run event handler routine, Return to User mode
- c) Save CPU state to stack, Switch to Kernel mode, Run event handler routine, Return to previous state
- d) Disable other interrupts, Run event handler routine, Enable other interrupts

Quiz 3

Which of the following is NOT an OS event?

- a) HW/SW interrupt.
- b) Signal.
- c) System call.
- d) Exception.

Quiz 4

Which would be an example of an asynchronous hardware event and a synchronous software event?

- a) Exceptions; Hardware Interrupts
- b) System Call; Software Interrupts
- c) Exceptions; Software Interrupts
- d) Hardware Interrupts; System Call

Quiz 5

What is the purpose of an exception?

- a) Catching any event in the kernel.
- b) Executing deferred actions due to kernel activities or hardware interrupts.
- c) Allowing the programmer to execute try and catch.
- d) Capturing some errors raised by the CPU while processing instructions.

Quiz 6

If a page fault occurs in kernel mode:

- a) The associated handler is executed.
- b) The kernel informs the debugger.
- c) The kernel aborts the process producing it.
- d) It stops the OS.

Quiz 7

What is FALSE about a system call?

- It is implemented as a trap.
- Its interface is offered as a system library routine.
- It causes a change in the CPU execution to kernel mode.
- It always causes a context change.

Quiz 8

How are system calls notified to the kernel?

- a) By sending a message with the number of the syscall.
- b) By activating a software interrupt indicating the number of syscall.
- c) By generating an exception in the CPU to activate the kernel.
- d) The PC is set to the kernel space address and execution is continued.

Quiz 9

Which of the following statements is true?

- a) System calls occur at hardware level and are asynchronous events.
- b) System calls occur at software level and are asynchronous events.
- c) System calls occur at software level and are synchronous events.
- d) System calls occur at hardware level and are synchronous events.

Quiz 10

What are system processes?

- All the processes that the Operating System execute.
- Any process executed in kernel mode.
- Any processes initiated by users that run in privileged mode.
- Processes executed by users that only run when there is a syscall, exception or interrupt.