

1. A ____ can be used to prevent a user program from never returning control to the operating system.
 - A) portal
 - B) program counter
 - C) firewall
 - D) timer
2. Embedded computers typically run on a ____ operating system.
 - A) real-time
 - B) Windows XP
 - C) network
 - D) clustered
3. Two important design issues for cache memory are ____.
 - A) speed and volatility
 - B) size and replacement policy
 - C) power consumption and reusability
 - D) size and access privileges
4. What are some other terms for kernel mode?
 - A) supervisor mode
 - B) system mode
 - C) privileged mode
 - D) All of the above
5. What statement concerning privileged instructions is considered false?
 - A) They may cause harm to the system.
 - B) They can only be executed in kernel mode.
 - C) They cannot be attempted from user mode.
 - D) They are used to manage interrupts.
6. Which of the following instructions should be privileged?
 - a. Set value of timer.
 - b. Read the clock.
 - c. Clear memory.
 - d. Issue a trap instruction.
 - e. Turn off interrupts.
 - f. Modify entries in device-status table.
 - g. Switch from user to kernel mode.
 - h. Access I/O device.

7. A message-passing model is ____.

- A) easier to implement than a shared memory model for intercomputer communication
- B) faster than the shared memory model
- C) a network protocol, and does not apply to operating systems
- D) only useful for small simple operating systems

8. A microkernel is a kernel ____.

- A) containing many components that are optimized to reduce resident memory size
- B) that is compressed before loading in order to reduce its resident memory size
- C) that is compiled to produce the smallest size possible when stored to disk
- D) that is stripped of all nonessential components

9. The Windows `CreateProcess()` system call creates a new process. What is the equivalent system call in UNIX:

- A) `NTCreateProcess()`
- B) `process()`
- C) `fork()`
- D) `getpid()`

10. What do you expect to learn in this course?