

QUIZZZCSE316_Quiz04
10 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Which type of kernel provides more security and stability?

☐ A**Hybrid kernel**☐ B**Monolithic kernel**☐ C**Exokernel**☒ D**Microkernel**

2. Which kernel type combines the advantages of both monolithic and microkernel architectures?

☐ A

Monolithic kernel

☐ B

Exokernel

☐ C

Microkernel

☒ D

Hybrid kernel

3. In a microkernel-based architecture, where are most of the operating system services located?

☐ A

Hypervisor

☒ B

User space

☐ C

Supervisor mode

☐ D

Kernel space

4. Which of the following is an advantage of a monolithic kernel?

☐ A

It is easier to maintain and update

☐ B

Better modularity and isolation of components

☒ C

It allows for easy communication between different components

☐ D

It is more secure than other types of kernels

5. Which type of kernel is Linux based on?

☐ A

Microkernel

☐ B

Exokernel

☐ C

Hybrid Kernel

☒ D

Monolithic Kernel

6. What is the primary function of an operating system kernel?

☐ A

GUI interface design

☐ B

File system organization

☒ C

Management of hardware resources

☐ D

Execution of user applications

?

7. What is a process in an operating system?

- ☐ A A device driver ☒ B A program in execution
☐ C A single thread of execution ☐ D A portion of memory

8. In a multitasking environment, what is the purpose of the context switch?

- ☒ A To save and restore the state of a process so that execution can be resumed from the same point later ☐ B To transfer data between different devices
☐ C To increase the processing speed of the system ☐ D To switch between different user interfaces

9. Which of the following information is typically stored in a PCB?

- ☐ A Hard disk space ☐ B System clock settings
☒ C Process state ☐ D User preferences

10. What does PCB stand for in the context of operating systems?

- ☒ A Process Control Block ☐ B Process Control Buffer
☐ C Program Counter Buffer ☐ D Processor Counter Block

Answer Key

- | | | | |
|------|-------|------|------|
| 1. d | 2. d | 3. b | 4. c |
| 5. d | 6. c | 7. b | 8. a |
| 9. c | 10. a | | |