



CSE316\_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?

- |   |   |
|---|---|
| <input type="checkbox"/> A A device driver              | <input type="checkbox"/> B A program in execution |
| <input type="checkbox"/> C A single thread of execution | <input type="checkbox"/> D A portion of memory    |

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

- |  |  |
|--|--|
| <input type="checkbox"/> A To save and restore the state of a process so that execution can be resumed from the same point later | <input type="checkbox"/> B To transfer data between different devices  |
| <input type="checkbox"/> C To increase the processing speed of the system  | <input type="checkbox"/> D To switch between different user interfaces |

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

- |  |  |
|--|--|
| <input type="checkbox"/> A Hard disk space | <input type="checkbox"/> B System clock settings |
| <input type="checkbox"/> C Process state   | <input type="checkbox"/> D User preferences      |

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

- |   |  |
|---|--|
| <input type="checkbox"/> A Process Control Block  | <input type="checkbox"/> B Process Control Buffer  |
| <input type="checkbox"/> C Program Counter Buffer | <input type="checkbox"/> 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 |      |      |