



CSE316_Quiz05
11 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Which of the following information is stored in a Process Control Block (PCB)?

- | | |
|---|---|
| <input type="checkbox"/> A The process's priority | <input type="checkbox"/> B The process's ID |
| <input type="checkbox"/> C All of the above | <input type="checkbox"/> D The process's physical address |

2. What is the role of Instruction Register during process execution?

- | | |
|---|---|
| <input type="checkbox"/> A It stores the address of the next instruction to be executed | <input type="checkbox"/> B It stores the data being processed |
| <input type="checkbox"/> C It stores the result of the computation | <input type="checkbox"/> D It stores the instruction currently being executed |

3. What is the purpose of the "Blocked" (or "Waiting") state in the process lifecycle?

- | | |
|---|---|
| <input type="checkbox"/> A The process is being terminated. | <input type="checkbox"/> B The process is currently executing its instructions. |
| <input type="checkbox"/> C The process is waiting for an external event to occur. | <input type="checkbox"/> D The process has finished its execution. |

4. Which of the following is NOT a valid process state in most operating systems?

- | | |
|---------------------------------------|------------------------------------|
| <input type="checkbox"/> A Terminated | <input type="checkbox"/> B Running |
| <input type="checkbox"/> C Waiting | <input type="checkbox"/> D Queued |

5. In a multitasking operating system, which state does a process enter after it has finished its execution?

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> A Blocked. | <input type="checkbox"/> B Terminated. |
| <input type="checkbox"/> C Ready. | <input type="checkbox"/> D Running. |

6. Which component of a PCB contains information about the current status of the CPU registers and program counter for a process?

- | | |
|---|---|
| <input type="checkbox"/> A Process ID. | <input type="checkbox"/> B Stack Pointer. |
| <input type="checkbox"/> C CPU Scheduler. | <input type="checkbox"/> D Context Data. |



7. **In a multitasking operating system, what does the term "context switch" refer to?**

- | | | | |
|----------------------------|--|----------------------------|--|
| <input type="checkbox"/> A | Swapping a process's code with another process's code. | <input type="checkbox"/> B | Switching the CPU from executing one process to executing another. |
| <input type="checkbox"/> C | Changing the state of a process from "Blocked" to "Ready." | <input type="checkbox"/> D | Changing the process's priority in the system. |

8. **What is a Process Control Block (PCB)?** a) A printed circuit board used in computers.

- | | | | |
|----------------------------|--|----------------------------|--|
| <input type="checkbox"/> A | A data structure used by the operating system to manage information about a process. | <input type="checkbox"/> B | A piece of hardware that manages peripheral devices. |
| <input type="checkbox"/> C | A component responsible for connecting processes to the network. | <input type="checkbox"/> D | A printed circuit board used in computers. |

9. **In a multitasking operating system, when a process is in the "Ready" state in the process lifecycle. What does it mean?**

- | | | | |
|----------------------------|---|----------------------------|---|
| <input type="checkbox"/> A | The process is currently running on the CPU. | <input type="checkbox"/> B | The process is waiting to be assigned to a CPU. |
| <input type="checkbox"/> C | The process is waiting for a specific event to occur. | <input type="checkbox"/> D | The process has finished its execution. |

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

- | | | | |
|----------------------------|--|----------------------------|--|
| <input type="checkbox"/> A | The source code of the process. | <input type="checkbox"/> B | The process's execution speed. |
| <input type="checkbox"/> C | The size of the process's executable file. | <input type="checkbox"/> D | Process state, program counter, CPU registers, and process priority. |

11. **What does the program counter (PC) within a PCB indicate?**

- | | | | |
|----------------------------|---|----------------------------|---|
| <input type="checkbox"/> A | The process's position within the system queue. | <input type="checkbox"/> B | The address of the next instruction to be executed for the process. |
| <input type="checkbox"/> C | The total time the process has been running. | <input type="checkbox"/> D | The process's current execution state. |

Answer Key

1. c

2. d

3. c

4. d

5. b

6. d

7. b

8. a

9. b

10. d

11. b