QUIZIZZ

NAME : _____

CLASS : _____

CSE316_Quiz_RealTimeScheduling
7 Questions

DATE : _____

1. Rate monotonic scheduling is

A. A type of memory management technique

B. A type of file system

C. A type of network protocol

D. A scheduling algorithm used in real-time operating systems

2. In rate monotonic scheduling the priority of the tasks

A. depends on the task's complexity

B. is directly proportional to their periods

C. is not related to their periods

D. is inversely proportional to their periods

3. In early deadline first scheduling the priority of the tasks

A. is not affected by the absolute deadline of the tasks

B. is randomly assigned regardless of the absolute deadline of the tasks

C. is inversely proportional to the absolute deadline of the tasks

D. is directly proportional to the absolute deadline of the tasks

4. Consider a set of three real-time tasks: Task A, Task B, and Task C. Each task has a specific execution time and deadline as follows:
Task A: Execution Time = 4 time units, Deadline = 10 time units
Task B: Execution Time = 3 time units, Deadline = 7 time units
Task C: Execution Time = 5 time units, Deadline = 15 time units
Assuming that the system starts at time 0, use the Early Deadline First (EDF) scheduling algorithm to determine the order in which these tasks will be executed.

A. Task B, Task A, Task C

B. Task C, Task A, Task B

C. Task B, Task C, Task A

D. Task A, Task B, Task C

5. Consider a set of four real-time tasks: Task A, Task B, Task C, and Task D. Each task has a specific period and execution time as follows:
Task A: Period = 10 time units, Execution Time = 3 time units
Task B: Period = 15 time units, Execution Time = 4 time units
Task C: Period = 20 time units, Execution Time = 2 time units
Task D: Period = 25 time units, Execution Time = 5 time units
Determine whether these tasks are schedulable using the Rate Monotonic Scheduling (RMS) algorithm. If not then which task will miss the deadline.

A. No, not all tasks are schedulable using the RMS algorithm. Task D will miss it's deadline.

B. Only Task A and Task B are schedulable using the RMS algorithm.

C. No, not all tasks are schedulable using the RMS algorithm. Task C will miss it's deadline.

D. No, not all tasks are schedulable using the RMS algorithm. Task A will miss it's deadline.

6. Which is not the property of multi-level feedback queue scheduling?

A. It allows priority

B. It allows preemption

C. It allows starvation

D. It allows aging

7. Which are the properties of Multi-level feedback queue scheduling.

A. It prevents starvation by aging processes

B. It uses different scheduling algorithms for different queues

C. It allows processes to move between queues

D. It reduces CPU utilization

**Answer Key**

| | | | |
|---|---|---|---|
| 1. d | 2. d | 3. c | 4. a |
| 5. a | 6. c | 7. c, b, a | |