

Started on Monday, October 21, 2024, 3:11 PM**State** Finished**Completed on** Monday, October 21, 2024, 3:15 PM**Time taken** 3 mins 43 secs**Points** 8.00/8.00**Grade** 100.00 out of 100.00**Question 1**

Correct

1.00 points out of 1.00

In Little's formula, λ , represents the ____.

Select one:

- ☐ a. average queue length
- ☐ b. average waiting time in the queue
- ☐ c. average CPU utilization
- ☒ d. average arrival rate for new processes in the queue ✓

Your answer is correct.

The correct answer is: average arrival rate for new processes in the queue

Question 2

Correct

1.00 points out of 1.00

The two general approaches to load balancing are _____ and _____.

Select one:

- ☐ a. coarse grained, fine grained
- ☐ b. soft affinity, hard affinity
- ☐ c. soft real-time, hard real-time
- ☒ d. push migration, pull migration ✓

Your answer is correct.

The correct answer is: push migration, pull migration



Question 3

Correct

1.00 points out of 1.00

The ____ occurs in first-come-first-served scheduling when a process with a long CPU burst occupies the CPU.

Select one:

- ☐ a. waiting time
- ☒ b. convoy effect ✓
- ☐ c. system-contention scope
- ☐ d. dispatch latency

Your answer is correct.

The correct answer is: convoy effect

Question 4

Correct

1.00 points out of 1.00

Which of the following scheduling algorithms must be nonpreemptive?

Select one:

- ☐ a. priority algorithms
- ☐ b. RR
- ☐ c. SJF
- ☒ d. FCFS ✓

Your answer is correct.

The correct answer is: FCFS



Question 5

Correct

1.00 points out of 1.00

Which of the following statements are false with regards to the Linux CFS scheduler?

Select one:

- ☐ a. Each task is assigned a proportion of CPU processing time.
- ☐ b. Lower numeric values indicate higher relative priorities.
- ☒ c. There is a single, system-wide value of vruntime. ✓
- ☐ d. The scheduler doesn't directly assign priorities.

Your answer is correct.

The correct answer is: There is a single, system-wide value of vruntime.

Question 6

Correct

1.00 points out of 1.00

Which of the following is true of multilevel queue scheduling?

Select one:

- ☐ a. Processes can move between queues.
- ☐ b. A queue cannot have absolute priority over lower-priority queues.
- ☐ c. It is the most general CPU-scheduling algorithm.
- ☒ d. Each queue has its own scheduling algorithm. ✓

Your answer is correct.

The correct answer is: Each queue has its own scheduling algorithm.



Question 7

Correct

1.00 points out of 1.00

___ scheduling is approximated by predicting the next CPU burst with an exponential average of the measured lengths of previous CPU bursts.

Select one:

- ☒ a. SJF ✓
- ☐ b. FCFS
- ☐ c. Multilevel queue
- ☐ d. RR

Your answer is correct.

The correct answer is: SJF

Question 8

Correct

1.00 points out of 1.00

The Linux CFS scheduler identifies _____ as the interval of time during which every runnable task should run at least once.

Select one:

- ☐ a. virtual run time
- ☒ b. targeted latency ✓
- ☐ c. nice value
- ☐ d. load balancing

Your answer is correct.

The correct answer is: targeted latency

