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Time taken 4 mins 54 secs

Grade 90.00 out of 100.00

Question 1

Correct

10.00 points out of 10.00

LWP is ____.

Select one:

- ☐ a. placed between system and kernel threads
- ☐ b. short for lightweight processor
- ☒ c. placed between user and kernel threads ✓
- ☐ d. common in systems implementing one-to-one multithreading models

Your answer is correct.

The correct answer is: placed between user and kernel threads

Question 2

Correct

10.00 points out of 10.00

The ____ model maps many user-level threads to one kernel thread.

Select one:

- ☒ a. many-to-one ✓
- ☐ b. many-to-many
- ☐ c. one-to-one
- ☐ d. two-level

Your answer is correct.

The correct answer is: many-to-one

Question 3

Correct

10.00 points out of 10.00

____ is not considered a challenge when designing applications for multicore systems.

Select one:

- ☐ a. Identifying data dependencies between tasks
- ☐ b. Determining if data can be separated so that it is accessed on separate cores
- ☒ c. Ensuring there is a sufficient number of cores ✓
- ☐ d. Deciding which activities can be run in parallel

Your answer is correct.

The correct answer is: Ensuring there is a sufficient number of cores

Question 4

Correct

10.00 points out of 10.00

Windows uses the ____.

Select one:

- ☐ a. one-to many-model
- ☒ b. one-to-one model ✓
- ☐ c. many-to-one model
- ☐ d. many-to-many model

Your answer is correct.

The correct answer is: one-to-one model

Question 5

Correct

10.00 points out of 10.00

Which of the following statements regarding threads is false?

Select one:

- ☐ a. The start() method actually creates a thread in the Java virtual machine.
- ☐ b. Both Pthreads and Win32 threads share global data.
- ☐ c. The Java method join() provides similar functionality as the WaitForSingleObject in Win32
- ☒ d. Sharing is automatically provided in Java threads. ✓

Your answer is correct.

The correct answer is: Sharing is automatically provided in Java threads.

Question 6

Correct

10.00 points out of 10.00

Cancellation points are associated with ____ cancellation.

Select one:

- ☒ a. deferred ✓
- ☐ b. synchronous
- ☐ c. asynchronous
- ☐ d. non-deferred

Your answer is correct.

The correct answer is: deferred

Question 7

Correct

10.00 points out of 10.00

Thread-local storage is data that ____.

Select one:

- ☐ a. is not associated with any process
- ☐ b. is generated by the thread independent of the thread's process
- ☒ c. is unique to each thread ✓
- ☐ d. has been modified by the thread, but not yet updated to the parent process

Your answer is correct.

The correct answer is: is unique to each thread

Question 8

Correct

10.00 points out of 10.00

According to Amdahl's Law, what is the speedup gain for an application that is 60% parallel and we run it on a machine with 4 processing cores?

Select one:

- ☐ a. .55
- ☐ b. .7
- ☐ c. 1.43
- ☒ d. 1.82 ✓

Your answer is correct.

The correct answer is: 1.82

Question 9

Incorrect

0.00 points out of 10.00

Each thread has its own register set and stack.

Select one:

- ☐ True
- ☒ False **✖**

The correct answer is 'True'.

Question 10

Correct

10.00 points out of 10.00

The single benefit of a thread pool is to control the number of threads.

Select one:

- ☐ True
- ☒ False **✔**

The correct answer is 'False'.

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