Question **1**

Complete

Mark 0 out of 1

Flag question

Which of the following is NOT stored in the stack created for a task ?

Select one:

- a. Registers of the exception frame
- b. Interrupt Source
- c. Program Counter
- d. local variables

Question **2**

Complete

Mark 1 out of 1

Flag question

Which of the following is NOT part of the Exception frame ?

Select one:

- a. PSR
- b. Stack Pointer
- c. Program Counter
- d. Link Register

Question **3**

Complete

Mark 0 out of 1

what is the register that its value should change to do the context switching

Select one:

Question **3**

Complete

Mark 0 out of 1

Flag question

what is the register that its value should change to do the context switching

Select one:

- a. Link Register
- b. Program Counter
- c. Stack Pointer
- d. PSR

Question **4**

Complete

Mark 1 out of 1

Flag question

Which of the following can periodically trigger the context switch?

Select one:

- a. hardware interrupt
- b. memory
- c. software interrupt
- d. peripheral

Question **5**

Complete

Mark 1 out of 1

context switching is:

Select one:

Question **5**

Complete

Mark 1 out of 1

Flag question

context switching is:

Select one:

- a. forcing the program counter to a specific address line to excute
- b. restoring saved context including its program counter value
- c. forcing link register to another return address
- d. forcing the stack pointer to another context table address
- e. A&C
- f. B&D

Question **6**

Complete

Mark 1 out of 1

Flag question

Which of the following provides a time period for the context switch?

Select one:

- a. time machine
- b. time slice
- c. counter
- d. timer

Question **1**

Incorrect

Mark 0.00 out of 1.00

Flag question

The usage of binary semaphores is analogous to the usage of flags, in that case the function of the xSemaphoreTake(xBinarySemaphore, portMAX_DELAY) API is to

Select one:

- a. Clear and Wait for the flag
- b. Clear and Check the flag
- c. Check the flag.
- d. Set the flag
- e. Wait for the flag ✖
- f. Clear the flag

Your answer is incorrect.

The correct answer is: Clear and Wait for the flag

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

The difference between a binary semaphore and a Mutex is:

Select one:

- a. Both are used for synchronization.
- b. The semaphore is used for resources management while the Mutex is used for

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

The difference between a binary semaphore and a Mutex is:

Select one:

- a. Both are used for synchronization.
- b. The semaphore is used for resources management while the Mutex is used for synchronization.
- c. Both are used for resources management.
- d. The Mutex is used for resources management while the semaphore is used for synchronization. ✔

Your answer is correct.

The correct answer is: The Mutex is used for resources management while the semaphore is used for synchronization.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

In a FreeRTOS project, two tasks were created (Task A and Task). Task A is a periodic task while task B is continuous task that gets blocked on xBinarySemaphore. If Task B has lower priority than Task A, and an interrupt was trigged during the execution of task A, if the ISR calls xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API, what would be the value of xHigherPriorityTaskWoken:

Select one:

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

In a FreeRTOS project, two tasks were created (Task A and Task). Task A is a periodic task while task B is continuous task that gets blocked on xBinarySemaphore. If Task B has lower priority than Task A, and an interrupt was trigged during the execution of task A, if the ISR calls xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API, what would be the value of xHigherPriorityTaskWoken:

Select one:

- a. True
- b. False ✔
- c. Non determined

Your answer is correct.

The correct answer is: False

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

In a FreeRTOS project, two tasks were created (Task A and Task). Task A is a periodic task while task B is continuous task that gets blocked on xBinarySemaphore. If Task B has higher priority than Task A, and an interrupt was trigged during the execution of task A, if the ISR calls xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API, what would be the value of xHigherPriorityTaskWoken:

Select one:

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

In a FreeRTOS project, two tasks were created (Task A and Task). Task A is a periodic task while task B is continuous task that gets blocked on xBinarySemaphore. If Task B has higher priority than Task A, and an interrupt was trigged during the execution of task A, if the ISR calls xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API, what would be the value of xHigherPriorityTaskWoken:

Select one:

- a. True ✔
- b. Non Determined
- c. False

Your answer is correct.

The correct answer is: True

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

The usage of binary semaphores is analogous to the usage of flags, in that case the function of the xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API is to:

Select one:

- a. Check the flag.
- b. Clear the flag.

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

The usage of binary semaphores is analogous to the usage of flags, in that case the function of the xSemaphoreGiveFromISR(xBinarySemaphore, &xHigherPriorityTaskWoken) API is to:

Select one:

- a. Check the flag.
- b. Clear the flag.
- c. Set the flag ✔
- d. Wait for the flag.
- e. Clear and wait for the flag.

Your answer is correct.

The correct answer is: Set the flag

Finish review