Started on	Wednesday, 15 February 2023, 1:51 PM
State	Finished
Completed on	Wednesday, 15 February 2023, 1:52 PM
Time taken	1 min 23 secs
Grade	**50.00** out of 50.00 (**100**%)

Information

After the theory part, two programming questions will be presented.

True or False questions (on Exam 1 you will get more questions of this type)

Question **1**

Correct

Mark 10.00 out of 10.00

In a priority scheme to handle multiple interrupts, the system disables the interrupts while an interrupt is being processed.

Select one:

○ True

◉ False ✔

The correct answer is 'False'.

Information

Simple Choice questions
(on Exam 1 you will get more questions of this type)

Question **2**

Correct

Mark 10.00 out of 10.00

Select the element that is not part of the process control block:

- ○ a. PID
- ○ b. Priority
- ○ c. State
- ◉ d. Program code✔
- ○ e. None of the above

The correct answer is:
Program code

Information

Calculate the average access time to read a word from memory for the following two-level memory system.

Level 1 memory access time = 50 ms
Level 2 memory access time = 400 ms
Failure ratio = 20%
Time to find a word in any level of the memory (0 ms).   **(15 points)**.

Question **3**

Correct

Mark 10.00 out of 10.00

Average access time =

Answer: | 130 | ✔

The correct answer is: 130

Information

Calculate the following parameters of a hypothetical computer system with these features:

a) Octal notation;

b) IR = OPCode + Mem Addr;

c) IR = 12 bits;

d) PC = 3 octal digits; and

e) Mem word size = Data (unsigned integer) = IR.   **(15 points)**

Question **4**

Correct

Mark 5.00 out of 5.00

Number of different OPCodes:

Answer: | 8 | ✔

The correct answer is: 8

Question **5**

Correct

Mark 5.00 out of 5.00

Mem size in bits:

Answer: | 6144 | ✔

The correct answer is: 6144

Question **6**

Correct

Mark 5.00 out of 5.00

Mem range: | 000 – 777 | ✓

| 000 – FFF | | 0000 – 7777 | | 000 – F77 |

The correct answer is:

Mem range: [000 – 777]

Question **7**

Correct

Mark 5.00 out of 5.00

Data range: | 0000 – 7777 | ✓

| 0000 – FFFF | | 000 – 777 | | 0 -7 |

The correct answer is:

Data range: [0000 – 7777]

◄ Programming Assignment 1

| Jump to... |

Programming Question 1 ►