Assignment 2

The due date for submitting this assignment has passed. Due on 2019-02-13, 23:59 IST.
As per our records you have not submitted this assignment.

1) If registers r5 and r8 contains (decimal) numbers 48 and 60 respectively, the value of r6 after execution of the following ARM instruction will be ............

\[
\text{RSB } r6, r5, r8
\]

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 12

2) If the register r10 contains the hexadecimal number A4A4C8C8, the hexadecimal value of number stored in register r4 after executing the following ARM instruction will be:

\[
\text{MVN } r4, r10
\]

a. 4A4A8C8C
b. 5B5B3737
c. 6C6C4848
d. None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
(b)
4) What does the following ARM instruction mean?

\[
\text{LDR } r10, [r5, #24]
\]

a. Load from memory location with address in \( r5 \), add 24 to the data, and store it in \( r10 \).
b. Load from memory location with address in \( r5 \), store it in \( r10 \), and add 24 to \( r5 \).
c. Load from memory location with address \( r5+24 \), and store it in \( r10 \).
d. None of these.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 55

5) Which of the following ARM instructions can be used to perform multiple register loads?

a. LDMIA
b. LDRB
c. LDMDB
d. LDRSH

No, the answer is incorrect.
Score: 0
Accepted Answers:
(c)

6) Where is the return address stored after execution of the Branch-and-Link (BL) instructic ARM?

a. In the stack.
b. In the register \( r14 \).
c. In the program counter pc.
d. None of these.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a)
(c)
7) What are the advantages of conditional execution feature in ARM?
   a. It helps reduce the number of branch instructions.
   b. It helps to improve the code density.
   c. It increases the number of instructions required.
   d. All of these.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (b)

8) Which of the following are present in the STM32F401 Nucleo board?
   a. 512 Kbyte of programmable flash memory
   b. ARM Cortex-M4 processor
   c. 96 Kbyte of static RAM
   d. All of these

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (d)

9) A rectangular pulse train has an ON period of 200 microseconds and an OFF period of milliseconds. The percentage duty cycle of the signal is ........ %.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (Type: Range) 14.2, 14.3

10)
The average value of a PWM signal can be varied by varying the:

a. Duty cycle keeping the period the same
b. Period keeping the duty cycle the same
c. Pulse width keeping the period the same
d. All of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
(a)
(c)