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Course outline

About NPTEL ()

How does an NPTEL online course work? ()

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 10 : Assignment 10

The due date for submitting this assignment has passed.

Due on 2025-04-02, 23:59 IST.

As per our records you have not submitted this assignment.

1) ***1 point***

THUMB instruction size is

a) 32 bit

b) 64 bit

c) 16 bit

d) 128 bit

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
c.

2) ***1 point***

Which of the following architecture is used to design PIC18F micro controllers?

a) Von neumann
b) Harvard
c) Gordon Moore
d) Alan turing

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

3) ***1 point***

What is the address bus size of PIC18F for accessing program memory?

a) 21 bit
b) 12 bit
c) 16 bit
d) 8 bit

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
a.

4) ***1 point***

What is the width of the data buses for program (DPM) and data (DDM) memory of the PIC18F family of microcontrollers.

a) DPM: 8 bits, DDM: 8 bits
b) DPM: 8 bits, DDM: 16 bits
c) DPM: 16 bits, DDM: 8 bits
d) DPM: 16 bits, DDM: 16 bits

- a.
- b.
- c.
- d.

Week 12 ()

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No, the answer is incorrect.
Score: 0

Accepted Answers:
c.

5) ***1 point***

Which of the following binary encoding is equivalent to the MOVLW 0x08 instruction in a PIC18F microcontroller?

a) 0000 1110 1110 0000
b) 1110 0000 0000 1110
c) 0000 1110 0000 1000
d) 0000 1110 0000 1110

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
c.

6) ***1 point***

Which of the following features are correctly mentioned with respect to an AVR AT90S23 microcontroller?

a) 2K bytes of In-System Programmable Flash, 128 bytes SRAM
b) 2K bytes of In-System Programmable Flash, 256 bytes SRAM
c) 4K bytes of In-System Programmable Flash, 128 bytes SRAM
d) 4K bytes of In-System Programmable Flash, 256 bytes SRAM

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
a.

7) ***1 point***

Who founded AVR?

a) Gordon Moore
b) Alf Egil Bogen and Vegard Wollan
c) Gary Boone
d) Elon Musk

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

8) ***1 point***

How many general purpose registers are present in AT90S2313 micro controller?

a) 16
b) 8
c) 32
d) 64

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
c.

9) ***1 point***

The encoded op-code 0x0CC8 corresponds to which of the following instructions in an AT90S2313 microcontroller?

a) ADD R0, R10
b) ADD R12, R6
c) ADD R10, R0
d) ADD R6, R8

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
d.

10) ***1 point***

Which of the following instructions does not conform to register direct addressing in an AVR microcontroller?

a) EOR R23
b) ADD R0, R10
c) CLR R22
d) ST Z, R14

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
d.

11) ***1 point***

The widths of the Output Compare Registers in an AVR microcontroller for Timer 0 (OCR and Timer 1 (OCR1), respectively are

a) OCR0: 8 bits, OCR1: 8 bits
b) OCR0: 8 bits, OCR1: 16 bits
c) OCR0: 16 bits, OCR1: 8 bits
d) OCR0: 16 bits, OCR1: 16 bits

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

12) ***1 point***

Which of the following statement(s) is/are TRUE, with respect to an ARM processor?

STATEMENT 1: If memory is organized as 16-bit words, ARM code is 25% faster than THUMB

STATEMENT 2: If memory is organized as 32-bit words, ARM code is 45% faster than THUMB

STATEMENT 3: If memory is organized as 16-bit words, THUMB code is 45% faster than ARM

STATEMENT 4: If memory is organized as 32-bit words, THUMB code is 60% faster than ARM

a) STATEMENT 1
b) Both STATEMENT 1 and STATEMENT 4
c) Both STATEMENT 2 and STATEMENT 3
d) STATEMENT 3

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
d.

13) ***1 point***

Which of the following combinations should be used for the best performance, with respect to ARM processor?

a) 16-bit memory and ARM instruction set

b) 32-bit memory and ARM instruction set

c) 16-bit memory with THUMB code

d) 32-bit memory with THUMB code

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.

14) ***1 point***

The maximum number of SWI calls can be made in the THUMB instruction mode of an AR processor is

a) 64

b) 128

c) 256

d) 512

a.
b.
c.
d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
c.

15) Smallest micro controller in AVR family is **1 point**

a) ATMEGA128

b) ATTiny11

c) ATtiny22

d) ATtiny24

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:
b.