

Unit 12 - Week 10

Course outline

How does an NPTEL online course work?

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Assignment 10

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-04-08, 23:59 IST.

- 1) THUMB instruction size is 1 point
- 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) Which of the following architecture is used to design PIC18F micro controllers? 1 point
- 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) What is the address bus size of PIC18F for accessing program memory? 1 point
- 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) What is the width of the data buses for program (DPM) and data (DDM) memory of the PIC18F family of microcontrollers. 1 point
- 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.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 5) Which of the following binary encoding is equivalent to the MOVLW 0x08 instruction in a PIC18F microcontroller? 1 point
- 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) Which of the following features are correctly mentioned with respect to an AVR AT90S2313 microcontroller? 1 point
- 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) Who founded AVR? 1 point
- 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) How many general purpose registers are present in AT90S2313 micro controller? 1 point
- a) 16
b) 8
c) 32
d) 64
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 9) The encoded op-code 0x0CC8 corresponds to which of the following instructions in an AT90S2313 microcontroller? 1 point
- 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) Which of the following instructions does not conform to register direct addressing in an AVR microcontroller? 1 point
- 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) The widths of the Output Compare Registers in an AVR microcontroller for Timer 0 (OCR0) and Timer 1 (OCR1), respectively are 1 point
- 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) Which of the following statement(s) is/are TRUE, with respect to an ARM processor? 1 point
- STATEMENT 1: If memory is organized as 32-bit words, ARM code is 45% faster than THUMB
STATEMENT 2: If memory is organized as 16-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) Which of the following combinations should be used for the best performance, with respect to an ARM processor? 1 point
- 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) The maximum number of SWI calls can be made in the THUMB instruction mode of an ARM processor is 1 point
- 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.