Unit 5 - Week 3

Assignment 3

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

Due on 2020-02-19, 23:59 IST.

1) *1 point*

How many times will the following loop be executed?

XRA A
MVI C, 05H
LOOP: **DCR** C
JNZ LOOP

a) Once
b) Five times
c) Infinite times
d) Depends on the initial value of A

○ a.
○ b.
○ c.
○ d.

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

2) *1 point*

Which of the following flags is not affected by a conditional branch statement in an 8085 microprocessor?

a) Zero flag
b) Carry flag
c) Sign flag
d) None of the given options

○ a.
○ b.
○ c.
○ d.

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

3) *1 point*

The interrupt in an 8085 microprocessor that is not affected by the value of the Interrupt Enable (IE) flip flop is

a) TRAP
b) INTR
c) RST 5.5
d) RST 7.5

○ a.
○ b.
○ c.
○ d.

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

4) *1 point*

Which of the following statements regarding 8085 interrupts is FALSE?

a) An interrupt is a process that starts from an I/O device and is asynchronous.
b) An interrupt can either be a maskable or non-maskable.
c) An interrupt can either be a vectored or a non-vectored one.
d) An interrupt is serviced only after the microprocessor completes the execution of its current program.

○ a.
○ b.
○ c.
○ d.

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

5) *1 point*

What are the status of the zero flag and the contents of the accumulator after execution of the following 8085 assembly code? Assume that contents of all other registers and memory locations are unknown.

MVI A, 65H
MVI B, 32H
CMP B

a) 0, 65H
b) 1, 65H
c) 0, 33H
d) 1, 00H

○ a.
○ b.
○ c.
○ d.

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

6) *1 point*

How many bytes does the following set of instructions occupy?

MVI A, 35H
MVI B, 23H
ADD B

a) Three bytes
b) Six bytes
c) Five bytes
d) Four bytes

○ a.
○ b.
○ c.
○ d.

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

7) *1 point*

Which of the following statements about the stack in an 8085 microprocessor is FALSE?

a) Stack is a last-in-first-out structure.
b) Information is saved on the stack by pushing on it.
c) Size of the register associated with the stack is 8 bits.
d) Information is retrieved on the stack by popping it off.

○ a.
○ b.
○ c.
○ d.

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

8) *1 point*

Which of the following operations on stack is an invalid one?

a) LXI SP, 0FFFH
b) PUSH PSW
c) SPHL
d) POP C

○ a.
○ b.
○ c.
○ d.

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

9) *1 point*

Which of the following statements regarding CALL and RET instructions is FALSE?

a) An 8085 program may contain multiple CALL instructions
b) An 8085 program may contain multiple RET instructions
c) In an 8085 program, the first CALL instruction may appear before the first RET instruction
d) In an 8085 program, the first RET instruction may appear before the first CALL instruction

○ a.
○ b.
○ c.
○ d.

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

10) *1 point*

What will be the contents of the registers A, B, and C, respectively, after the execution of the following 8085 program?

MVI C, 03H
LXI H, 2000H
MOV A, M
DCR C
L1: **INX** H
MOV B, M
CMP B
JNC L2
MOV A, B
L2: **DCR** C
JNZ L1
STA 2100H
HLT

Contents of the memory locations are as follows.

2000H: 18H

2001H: 10H

2002H: 2BH

a) 2AH, 2BH, and 00H

b) 2BH, 2BH, and 02H

c) 2BH, 2AH, and 00H

d) 2BH, 2BH, and 00H

○ a.
○ b.
○ c.
○ d.

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

11) *1 point*

If an 8085 microprocessor works at a frequency of 1 MHz, determine the total delay of the following sequence of instructions (in seconds).

MVI A, 0FH

MVI B, 0FH

L1: **DCR** B

JNZ L1

a) 224 µs

b) 222 µs

c) 223 µs

d) 221 µs

○ a.
○ b.
○ c.
○ d.

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

12) *1 point*

Contents of the stack pointer (SP) after executing following instructions?

LXI 3FFFH
PUSH B
HLT

a) SP = 4001H
b) SP = 3FFDH
c) SP = 4000H
d) SP = 3FFEH

○ a.
○ b.
○ c.
○ d.

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

13) *1 point*

The Program Status Word register pair in an 8085 microprocessor is realized as the pair of which of the following registers?

a) Program Counter and Accumulator
b) Program Counter and Stack Pointer
c) Accumulator and Flag Register
d) Program Counter and Flag Register

○ a.
○ b.
○ c.
○ d.

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

14) *1 point*

The total number of memory accesses involved (including opcode fetch), when an 8085 microprocessor executes the instruction **LDA** 2020H is.

a) 1
b) 2
c) 3
d) 4

○ a.
○ b.
○ c.
○ d.

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

15) *1 point*

Identify the addressing mode of the following 8085 instruction.

ADD C

a) Implied addressing mode
b) Immediate addressing mode
c) Direct addressing mode
d) Register addressing mode

○ a.
○ b.
○ c.
○ d.

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