

Started on	Monday, 29 January 2024, 2:00 PM
State	Finished
Completed on	Monday, 29 January 2024, 2:20 PM
Time taken	19 mins 6 secs
Grade	7 out of 10 (70%)



## Information

Answer the questions based on the code given below:

```
ORG 0H
LJMP MAIN
ORG 100H
MAIN:

CALL XYZ
HERE: SJMP HERE
ORG 130H
XYZ:   MOV 50H , #1BH
      MOV 51H , #0FH
      MOV A , 50H
      MOV B , 51H
S:     SUBB A , B
      JC HERE1
      JZ HERE2
      MOV R2 , B
      CJNE R2 , #00H , S
      JMP ENDING
HERE1: CPL A
      INC A
HERE2: XRL A , B
      XRL B , A
      XRL A , B
      MOV R2 , B
      CJNE R2 , #00H , S
      JMP ENDING
ENDING: MOV 52H , A
RET
END
```



**Question 1**

Correct

Mark 3 out of 3

What logic is being implemented by this code?

- ☐ a. Finding MAX number
- ☐ b. Finding LCM of a number
- ☐ c. Finding Prime number
- ☒ d. Finding GCD of a Number ✓

Your answer is correct.

The correct answer is: Finding GCD of a Number

**Question 2**

Incorrect

Mark 0 out of 2

Initially 1BH is stored in A, after two iterations of label "S" what is the value stored in A?

NOTE: Answer should be in HEXADECIMAL format.

Answer: 03H

✗

The correct answer is: FD

**Question 3**

Correct

Mark 2 out of 2

What is the content of memory 52H at the end?

NOTE: Answer should be in HEXADECIMAL format.

Answer: 03H

✓

The correct answer is: 03H



**Question 4**

Correct

Mark 2 out of 2

What does the code snippet shown below do?

```
XRL A , B
```

```
XRL B , A
```

```
XRL A , B
```

- ☐ a. Bitwise complement of a number
- ☒ b. Swap two numbers ✓
- ☐ c. Subtraction of two numbers
- ☐ d. Multiply two numbers

Your answer is correct.

The correct answer is: Swap two numbers

**Question 5**

Incorrect

Mark 0 out of 1

What is the use of instructions JZ?

- ☐ a. Jump to the specified label if the most significant bit of R0 is 0
- ☐ b. Jump to the specified label if the value of accumulator is 0
- ☐ c. Jump to the specified label if the value of R0 is 0
- ☒ d. Jump to the specified label if the value of carry bit is 0 ✗

Your answer is incorrect.

The correct answer is: Jump to the specified label if the value of accumulator is 0

Jump to...

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