Winter_25_Quiz_6 - Results

Attempt 1 of 1

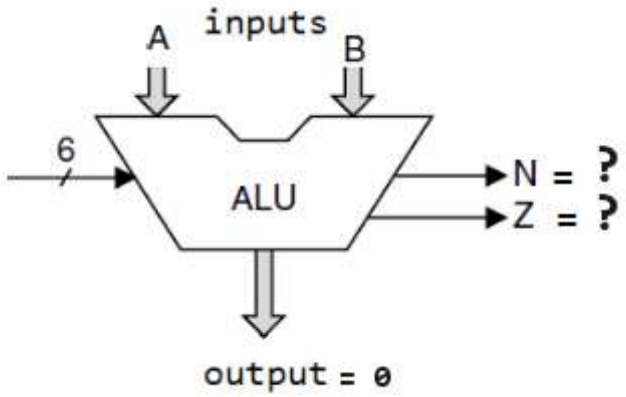
Written Mar 4, 2025 7:38 PM - Mar 4, 2025 7:58 PM

You successfully submitted your quiz.

Attempt Score	**14 / 18 - 77.78 %**
Overall Grade (Highest Attempt)	**14 / 18 - 77.78 %**

Question 1

According to the following image :



- ✔ N = 0, Z = 1
- N = 0, Z = 0
- N = 1, Z = 0
- N = 1, Z = 1

Question 2

A program consists of 5 floating point instructions and 10 integer instructions. Floating point instructions take 6 cycles and integer instructions take 3 cycles each. Assuming that the processor has a clock rate of 1 KHz, obtain:
a) the average cycles per instruction
b) the execution time in msec

a) total instructuions / total cycles
(5x6) + (10x3) / (6 + 3) = 6.66
b)
ct = 1/cr
ct = 1/ 1000
ct = 0.001
execution time = IC x CT x CR
ET = 6.66 x 0.001hz
ET = 4000ns
ET =

execution time = IC x CT x CR
IC x CT = 60
60 x 1000
60000ns

The correct answer is not displayed for Written Response type questions.

▼ Hide question 2 feedback

Feedback

(5*6+10*3)/(15)= 4
60*1/1000 s = 1000*(60*1/1000) ms = 60 msec

Question 3

What does the data path cycle define in a computer system?

- ◯ The type of processor used in the system
- ➡ ◯ The operations a machine can perform
- ◯ The speed of data retrieval from storage
- ✖ ◯ The amount of memory a system can hold

Question 4

------ holds the instruction currently being executed.

- ◯ Program counter (PC)
- ✔ ◯ Instruction register (IR)
- ◯ BX register
- ◯ AX register

Question 5

MOV AX, [100] is a ----- instruction.

- ◯ Memory-Memory
- ◯ Register-Register
- ✔ ◯ Register-Memory

Question 6

A bus has a 200-MHz clock or a bus cycle of ---- nsec

- ◯ 200
- ✔ ◯ 5
- ◯ 20
- ◯ 10

Question 7

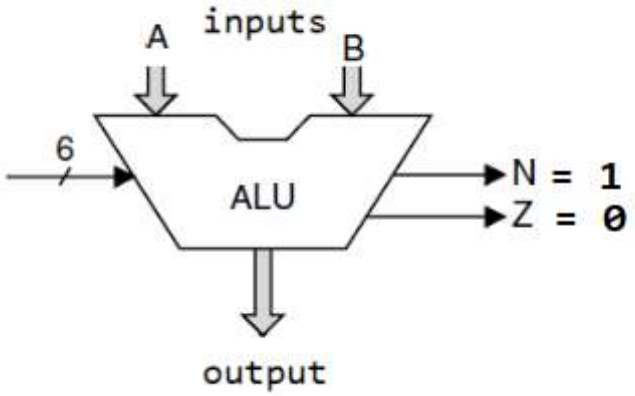
According to the following image, the machine code is ----- bits.

```
AX=0000  BX=0000  CX=0000  DX=0000  SP=FFEE  BP=0000  SI=0000  DI=0000
DS=0A3E  ES=0A3E  SS=0A3E  CS=0A3E  IP=0100   NV UP EI PL NZ NA PO NC
0A3E:0100 B8FF0F        MOV     AX,0FFF
```

- ✔ 24
- 12
- 32
- 20
- 6
- 16
- 8

Question 8

According to the following image :



- output = 0
- ✔ output<0
- output>0

Done