# DATA MANIPULATION

1. Which of the following is not contained in a CPU?

chứa lệnh chuẩn bị thực hiện (instantly)

A. Instruction register B. Program counter chứa địa chỉ ô nhớ có địa chỉ của lệnh tiếp theo

C. General-purpose register D. Memory cell Ô nhớ nằm trên RAM

2. Which of the following instructions (as described in the language description table) change the content of the memory cell?

A. 10AB B. 20AB C. 30AB D. 40AB

3. Which of the following instructions (as described in the language description table) place 00000000 in the register A?

A. 1A00 B. 2A00 C. 3A00 D. 200A

4. Which of the following instructions (as described in the language description table) place 00000000 in the register 5?

A. 25FF B. 9555 C. 15FF D. 8555

5. Which of the following instructions (as described in the language description table) will not change the contents of the register 5?

A. 1508 B. 2508 C. A503 D. A508

6. Which of the following instructions (as described in the language description table) is equivalent to requesting that register A be rotated to the left by three bits?

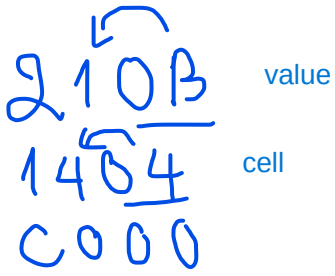
A. AA05 B. AA03 C. AA08 D. AA01

7. Which of the following instructions (as described in the language description table) change the contents of register 7?

A. 4077 B. 4075 C. 4057 D. 37BB

8. The following table shows a portion of a machine's memory containing a program written in the language described in the language description table. Answer the questions below assuming that the machine is started with its program counter containing 00.

| address | content |
|---|---|
| 00 | 21 |
| 01 | 0B |
| 02 | 14 |
| 03 | 04 |
| 04 | C0 |
| 05 | 00 |




A. What bit pattern will be in register 4 when the machine halts?

R4 chứa C0, đổi: 1100 0000

B. What bit pattern will be in register 1 when the machine halts?

R1 chứa 0B, đổi: 0000 1011