Q5 :

2211 →(LOAD )would cause the value 11 to be placed in register 2.

3202 → (STORE ) would cause the contents of register 2 to be placed in the memory cell whose address is 02.

C000 → would cause program execution to stop.

Q9 :

a. LOAD register 6 with the hexadecimal value 77. → 2677

b. LOAD register 7 with the contents of memory cell 77. → 1777

c. JUMP to the instruction at memory location 24 if the contents of register 0 equals the value in register A. → BA24

d. ROTATE register 4 three bits to the right. → A403

e. AND the contents of registers E and 2 leaving the result in register 1. → 81E2 or 812E

Q16 :

2B07 → (LOAD )would cause the value B0 to be placed in register 7.

3B06 → (STORE ) would cause the contents of register 6 to be placed in the memory cell whose address is B0

C000 → would cause program execution to stop

0023 → It is not executed because the program has stopped

a. List the addresses of the memory cells that

contain the program that will be executed if

we start the machine with its program coun-

ter containing 00.

Address Contents

00 2B

01 07

02 3B

03 06

04 C0

05 00

b. List the addresses of the memory cells that

are used to hold data.

in B0 It contains the contents of register 6