5. In this section, you will be given a task and two code snippets in MIPS assembly language. You will have to decide which of the code snippets can be used for the task. For all the questions assume the following initial values:

Registers:

Register	Value	
\$s0	0x0000	OOFF
\$s1	0x0000	0004
\$s2	0x0000	0008
\$s3	0x0000	000C

Memory:

Address		Value		
	0x0000	00000	0x0000	FF00
	0x0000	00004	0x0000	OOFF
	0x0000	80000	OxFFFF	FFF7
	0x0000	0000C	0x1234	5678

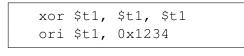
(a) (3 points) Set the content of the register \$\pm11\$ to 0x0000 1234

(A)

\$t1, 0xC(\$0)

srl \$t1, \$t1, 16

(B)



 \square none

lw

Α		

■ Both A and B

(b) (3 points) Starting from the address 0x0000 4000 write all zeroes to 1024 consecutive memory locations (until 0x0000 5000)

В

(A)

(B)

\$s0, \$s1, LOOP

addi \$s0, \$s0, 0x4000 addi \$s1, \$s0, 0x1000 \$s2, \$0, addi 1 LOOP: sw \$0, \$s0 sub \$s1, \$s1, \$s2

bne

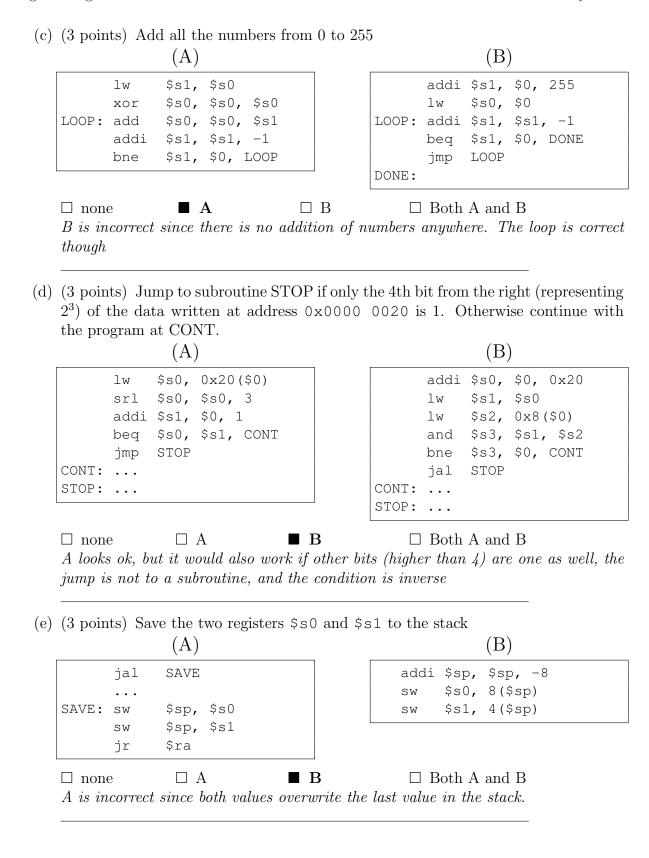
addi \$s0, \$s0, 0x1000 \$0, 0x4000(\$s0)LOOP: sw addi \$s0, \$s0, -1 bne \$s0, \$0, LOOP

 \square Both A and B B is incorrect \square none \blacksquare A \square B since the assignment is on \$s0 which constant at 0x4000. If that line were to read:

LOOP: sw \$0, \$s1

it would be correct.

Second Session Exam Page 12 of 15



Second Session Exam Page 13 of 15