

ONLINE QUIZ
AY2019/2020 Semester 2
CS2100 — COMPUTER ORGANISATION
11 March 2020
ANSWER SHEET

Total mark

/40

Question 0: Personal Particulars

[1 mark]

Student Number

Tutorial Grp

A	
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Question 1: Warmup Questions

[8 marks]

a)

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[2 marks]

b)

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[2 marks]

c)

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[2 marks]

d)

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[2 marks]

Question 2: Compilation

[8 marks]

```
ADD $1, $0, $0, 0    # sum = 0
ADD $2, $0, $0, 0    # i = 0
loop: BEQ $1, $0, cont # while (sum == 0) continue
      BEQ $0, $0, end  # otherwise, end
```

<pre>break: BEQ \$0, \$0, loop # goto loop end:</pre>

Question 3: Encoding

[14 marks]

a)	Hexadecimal	SIMP	
	0x402F		[2 marks]
		L: ADD \$2, \$2, \$2, 0	[2 marks]
	0x241F		[2 marks]
	0xE08A		[2 marks]
		BEQ \$1, \$1, L	[2 marks]
		E:	

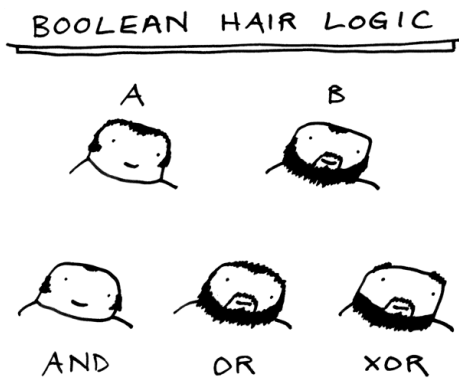
- b) (i) [2 marks] (ii) [2 marks]

Question 4: Datapath and Control

[9 marks]

a)									[1 mark]
b)									[1 mark]
c)	RR1	RR2	WR	OP1	OP2	OP3	addr	MWD	[7 marks]
	\$4								

Feedback: this will not affect your marks in any way



Do you have any comment/feedback about the module?