Name: Tanjim Reza Student ID: 20101065 Section: 12 Course: CSE340 Assignment: 02

Date:

Ans: to the que no: 01

Guven

add: 20%

addi: 20%

not: 090

beg: 25%

lu : 25%

SW : 10%

Memory Access: lu and su

So, sur and hur will use Data Memory.

.. Fraction of all cycles is the data

memory used = lu + sw

= 25% + 10%

= 35%

Sub		
-----	--	--

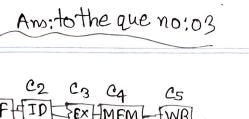
me: Date: / /

Am: to the que no:02

In the input of sign-extender circuit we will need additbeg, hu, sw.

infraction of all eycles is the input of the sign-extender circuit needed

- = addi, + beg + lue + sw
 - = 20% + 25% of lu + SW
 - = 20% +25% +25% + 10%
 - = 80%



1.	luc \$t0, 36(\$t1)	C ₁ C ₂ IF ID	C3	C4 MEM-	C5 - WB 55	ince az	
2.	lu, \$t2, 40(\$t0)	·;· ·	~ S	II II	S E	X HMEM	c. W





CII

Using Stall

2 me need 19
$$e^{-\frac{19}{7}} = 2.714$$

$$CPI = \frac{19}{7} = 2.714$$

Ans: to the que no: 04	
1. Lu \$10, 36(\$11)- IF FOR EX HMEM- (VB)) (2
2. lm \$12,40(\$10)	Sub:
3. Lm 3+3, 44(3+2)	
4-511 \$+3, \$+21.2 == [IF-1]D EX MEM-WB	
5. sub 410, 413, 412	
	<u>c12</u>
7. STU 4+0, 4+3, 2	B C13
IF ID EX MEM	7
13 Clock cycles	Day Time:
$cPI = \frac{13}{X}$	
: 1.857	Date:

Aw: to the que no:5 1. lu \$40, 36(\$11)-IF HIDT SEX MEM WB C6 2. Lw \$+2,40(\$+0)____ 3. lu \$t3, 44 (\$t2) 4. sll \$13, \$12,2 5. sub \$10, \$13, \$12 6. addi 4to, \$t0, 2 7. Std \$40, \$13,2 Here, we can see that scheduling is impossible to apply as it will chang the sequence of the code. Therefore only stall and formatting is done. (clock cycle 13)

EXT MEM WB CIL IF ID EX MAM WB IF ID SEX MEM WB

:CPI = \frac{1}{2} = 1.88x