Birzeit University
Faculty of Engineering and Technology
Department of Electrical and Computer Engineering
ENCS2380 – Computer Organization and Microprocessor (Term 1242)

Name (بالعربي): _____   **ID:** _____

Question: Given the memory values below and a two-address machine with four 8-bit registers,

Memory

20	40
…	
30	50
…	
40	60
…	
50	70

R0

5

R1

30

R2

20

R3

40

identify the addressing mode of the second operand and determine the value of R0 after executing each of the following instructions. Assume that the instructions are independent of one another.

Instruction	Addressing Mode (Second Operand)	R0 Register Value After Execution
Load R0, [#20]		
Load R0, #194		
Add R0, R3		
Load R0, [[#30]]		
Load R0, [R1]		
Add R0, [R2, #20]		