



University of Central Punjab

(Incorporated by Ordinance No. XXIV of 2002 promulgated by Government of the Punjab)

FACULTY OF INFORMATION TECHNOLOGY

Computer Organization and Assembly Language

Lab 3	
Topic	1. Addressing Modes with variations.

Q1: Write a program to solve the following:

Use **any addressing mode** to access memory variables:

Let

A=150

B=30

C=20

I. Save the sum of these three variables (A+B+C) in ax.

II. Save the result (A-C) in cx.

III. subtract (ah-cl) and save the result in dh.

NOTE: *Execute the code in sequence.*

Q2: Write a program to solve the following using the address of variable '**B**':



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Use **direct addressing mode** to access memory variables:

Let

A=150

B=30

C=90

- I. Save the sum of these three variables (A+B+C) in ax.
- II. Save the result (A-C) in cx.
- III. subtract (ah-cl) and save the result in dh.

NOTE: Execute the code in sequence.

Hint: for reference see Question 1 (b) of Part 1

Q3: Write a program to solve the following using the address of variable 'Num3':

Use **indirect addressing mode** to access memory variables:

Let

Num1: db 10

Num2: db 30h

Num3: db 0x90

Num4: db 0x1A

Num5: db 29

- I. Save the sum of these five variables (Num1+Num2+Num3+Num4+Num5) in ax.
- II. Save the result (Num2-Num5) in cx.
- III. Subtract (cl-ah) and save the result in dl.



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