University of Central Punjab

Faculty of Information Technology

Computer Organization and Assembly Language (COAL)
Mid Term Exam Lab – Fall 2020

Name:	Registration Number

Total Marks:50   **Time Allowed: 2 hour**

Instructions:

1. This is closed book and closed notes paper.
2. Only computer calculator is allowed.
3. Attempt all questions.
4. Submit the .asm files of both questions with proper comments.

<u>Good Luck</u>

Question# 1:   20 marks

Write an assembly program that will find the second minimum number from the array.

Note:

Declare array of minimum 15 elements with data type of your choice

Question # 2:   30 marks

Write a program which traverse an array of **word size** and check whether the given number is divisible by 8 or not. If it is divisible by 8 replace 1 at that position else place 0. Array contains 10 elements.

Note:

Use only bit manipulation instructions (Shifting, Rotation and bit masking) to check the condition.

Do not use Mul, Div instructions.

Example:

input: dw 8,13,16,21,24,30,32,40,48,56

After execution the output will be

input: dw 1,0,1,0,1,0,1,1,1,1