# **BCSF21 Morning**

# Computer Organization and Assembly Language LAB

#### Instructions:

- Do Proper formatting and commenting of the code
- Do not cheat otherwise 0 will be marked
- Each Question is of 10 marks
- If you have any question regarding lab, must ask

**Question#1**:(5(Structure)+3(Operations)+5(Adjustment Instructions)+2(Error Handling)) **Calculator(ASCII Adjustment after Arithmetic Operations)** Write a program that will take 2 numbers from the user and ask them about the options whether they want addition, multiplication, subtraction or division.

You must also deal with double digit values as a result. Do Proper Error Handling.

## Sample Output:

Give First Number:8 Give Second Number:4 Output:32

**Question#2**:(2(Conversion)+5(Checking Even/Odd)+3(Clearing Register))

**Even Or Odd(Logic Instruction)** Write a program to read a character(0-9) from the user. First Convert it into its digit equivalent using Logic Instructions. Then use Test Instruction to check whether the given number is even or not. If even then print Given Number is even and vice versa. After printing this string, you will have Offset Address of String in DX Register. Clear this DX Register using Logic Instructions and then print the input character.

#### Sample Output:

Give Number:5
Given Number is Odd
Number You've Entered:5

**Question#3**:(5(Reading String)+5(Printing Equivalent Reverse String))

**String Input and Output(Stack and Loops)**. Read a string from the user separated with spaces until the user presses Enter.Output the reverse of input string in the next line.

#### Sample Output:

Give String:Hello PUCIT Output String:TICUP olleH

## Question#4:(10)

**String Input and Output(Stack and Loops)**. Read a string from the user separated with spaces until the user presses Enter.Output the string in the next line in the following form:

### Sample Output:

Give String:Hello PUCIT Output String:olleH TICUP