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| Total Pages: 2 |

Bahria University



Lahore Campus

# Mid Term Exams (Spring-2023 Semester)

*Department of Computer Sciences*

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| Paper Show Date & Time: 07**/04/2023 & 11:00 - 12:30** |

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| **Exam Date & Time** | **07/04/2023 & 11:00 - 12:30** | **Session** | **Spring 2023** |
| **Instructor Name** | **Maryam Munawar** | **Program/Semester:** | **3rd** |
| **Course Title** | **Computer Organization & Assembly language Lab** | **Course Code:** | **CEN-222** |
| **Time Allowed** | **90 mins** | **Max Marks** | **20** |

**Instructions:**

**I. Attempt all questions**

**Student Name** ……………………………. **Enrollment Number**:………………………………

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| **Evaluation of CLO** | **Ques # / Part #** | **Marks** | **Obtained Marks** |
| **CLO1:** Acquire the basic knowledge of computer organization, computer architecture and assembly language. | Q1 | 5 |  |
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|  |  |
| **CLO2:** Implement the arithmetic logical operation using Instruction set architecture (ISA) at ALU & memory units. | Q1 | 5 |  |
|  |  |
|  |  |
| **CLO3:**  Solve the problems related to computer organization and assembly language. | Q2 | 10 |  |
|  |  |
| **Total Marks** | | **20** |  |
|  | |  |  |

**SUBJECTIVE TYPE**

**Read out the Instructions carefully.**

All Questions are compulsory.

**CHEATING IS NOT TOLERABLE** anyone found doing cheating will be graded as zero, Try to attempt your paper as per your knowledge that will be surely graded.

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**Question 1: (5\*2=10 Marks)**

1. Write programs to evaluate the following expressions. The user should enter the variables, and the program should print back an answer. x3 + 2x2 + 3x + 4
2. Write a program to enter the basic salary of an employee. If the basic salary is greater than 10,000 the employee gets 20% of basic salary as medical allowance and 30% as home allowance. For employees with salary less than 10,000 these allowances are 10% and 15% respectively. Given the salary of an employee, compute the gross salary use branches.

**Question 2: (10 Marks)**

Convert the following Pseudo code to the assembly language code.

n = prompt("enter the value to calculate the sum up to: ")

total = 0; # Initial the total variable for sum

for (i = 0; i < n; i++)

{

total = total + i

}

print("Total = " + total);