** COMSATS Institute of Information Technology Lahore**

**Assignment-II**

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| Course Title: | Computer Organization & Assembly Language | Course Code: | | CSD203 | | Credit Hours: | 3 |
| Course Instructor/s: | Ms. Iqra Obaid | Programme Name: | | BSSE, BSCS | | | |
| Semester: | 3rd | Section: | | G, H, D | | | |
| **Deadline:** | **24 November 2017** | **Maximum Marks:** | | | **15** | | |
| Student’s Name: |  | Reg. No. | CIIT/SDP-SP -BCS- /LHR | | | | |
| **Important Instructions / Guidelines:**   * Attempt all questions. * Show all intermediate steps while solving a question. | | | | | | | |

**Question 1: [Marks: 2**

Write some code to multiply the value of BX by 4 using shift instructions. Assume that there is no overflow.

**Question 2: [Marks: 2 x 2=4**

**Use Test instruction to:**

1. Set ZF if DX contains a zero or a positive number.
2. Set PF if BL contains an even number of 1 bits

**Question 3:**

Suppose DH contains 7Bh, CF = 1 and CL contain 3. What are the values of DH and CF when the instruction

ROR DH, CL is executed. **[Marks: 3**

**Question 4:**

**Write instructions to do each of the following: [Marks: 2 x 3= 6**

1. Multiply the value of BL by 10d. Assume overflow does not occur.
2. Divide -2145 by 16 and put the quotient in AX