**COMSATS** **University Islamabad, Lahore Campus**

**Department of Computer Science**



**Assignment 1 – Semester Fall 2024**

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| Course Title: | Computing Technologies for Business | | | | Course Code: | MGT-171 | Credit Hours: | 3(2,1) |
| Course Instructor/s: | Tahir Muhammad | | | | Program Name: | BDA | | |
| Semester: | 1 | Batch: | FA24 | Section: | B | Date | 27-September 2024 | |
| Student’s Name: | **Mehar Javed** | | | | Reg. No. |  | | |
| **Important Instructions / Guidelines:**   * Solve it in the word file using this template. * Do not copy code from the internet else you will be awarded a zero. * Write detailed steps for each solution. * Online Submission Deadline **27-09-2024**  |  |  |  | | --- | --- | --- | | **Problem No.** | **Max. Marks** | **Obtained Marks** | | **1** | 10 |  | | **Total** | 10 |  | | | | | | | | | |

**Q1:**

1. Perform the following conversion pairs? [6 Marks] **(CLO1 PLO1)**
2. **Decimal to Binary**

**(30.8125)10 = ( )2**

1. **Binary to Decimal**

**(1101100011)2 = (\_\_\_\_\_\_\_\_\_\_\_\_)10**

1. **Octal to Binary**

**(7543)8 = (\_\_\_\_\_\_\_\_\_\_\_\_)2**

1. **Binary to Octal**

**(110001101)2 = (\_\_\_\_\_\_\_\_\_)8**

1. **Hexa-decimal to Binary**

**(96FA6)16 = (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)2**

1. **Binary to Hexa-decimal**

**(0111011001)2 = (\_\_\_\_\_)16**

1. Perform the following arithmetic operations? [4 Marks] **(CLO1 PLO1)**
2. **Addition**

**(110110001)2 + (56)10 = (\_\_\_\_)16**

1. **Subtraction**

**(4501)8 – (54B)16 = (\_\_\_\_\_)10**

1. **Multiplication**

**(14)10 \* (237)8 = (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)2**

1. **Division**

**(1110111001)2 / ( 1001101101)2 = (\_\_\_\_\_\_)8**

**QUESTION 1**

**Decimal to binary (30.8125)10**

**SOLUTION**

30 + 0.8125

|  |  |
| --- | --- |
| 2 | 30 |
| 2 | 15 - 0 |
| 2 | 7 - 1 |
| 2 | 3 - 1 |
| 2 | 1 - 1 |

