******COMSATS University Islamabad (Lahore** **Campus)**

**Assignment <1>– Fall 2024**

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| Course Title: | Computational Intelligence | Course Code: | CSC 347 | Credit Hours: |  |
| Course Instructor: | Asia Maqsood | Programme Name: | BSCS | | |
| **Due Date:** | **19-09-2024** | **Maximum Marks:** | | **20** | |
| **Important Instructions / Guidelines:**  It should be handwritten and plagiarism-free.  It should be in a presentable way. | | | | | |

**Question No 1. Marks: 10**

***CLO: <1>; Bloom Taxonomy Level: <Understanding>***

Explain the fundamental difference between Artificial Intelligence (AI) and Computational Intelligence (CI). Discuss the foundations of CI and how they differ from traditional AI methods. Provide examples of real-world applications of CI techniques in solving complex problems, highlighting the advantages of CI over AI in specific scenarios.

**Question No 2. Marks: 5+5= 10**

***CLO: <1>; Bloom Taxonomy Level: < Understanding >***

1. Discuss the significance of fuzzy logic in Computational Intelligence. How do fuzzy membership functions contribute to decision-making processes in systems requiring uncertainty handling?
2. Provide real-world applications where fuzzy logic plays a key role.