



HITEC UNIVERSITY
Department of Computer Science
BS (Batch 2024), Semester Fall-2025

Assignment No. 01

Subject: Artificial Intelligence

Instructor: Mr. Mubashir Iqbal

Marks: 30

Last Date of submission: 11 Nov 2025, 14:00

GENERAL INSTRUCTIONS FOR HAND WRITTEN ASSIGNMENT

- Use Proper Paper: Write on white, lined paper with margin lines on the left.
- Headings & Formatting: Use a black marker for main headings. Use a blue marker for subheadings.
- Write the primary content with a blue or black pen (no other colors).
- Submit the assignment before the last date and time.
- Draw every possible shape, diagram, graph, and plot.
- Keep your handwriting clean and readable. Underline important terms neatly. Avoid cutting or overwriting.
- The first page should be a cover page (like a lab report cover page).

Course Outcome	Student Outcome	Learning Domain
CO-1, CO-2	SO-1	Cognitive 3

Q1: Answer briefly in your own words (4–8 lines each): (Marks 10)

1. Define Artificial Intelligence with one real-life example.
2. Differentiate between Weak AI, Strong AI, and Super AI.
3. Explain the Goals of AI Development.
4. What is an Intelligent Agent? How does it interact with its environment?
5. Define Reactive Machines and give one real-world example (e.g., IBM Deep Blue).

Q2: Compare **Breadth First Search (BFS)** and **Depth First Search (DFS)** in terms of: (Marks 10)

1. Memory usage
2. Search order
3. Completeness and Optimality

Q3: Explain why most AI programs are implemented on **Von-Neumann machines**. (Marks 10)