



**HITEC UNIVERSITY**  
Department of Computer Science  
**BS Cyber Security Program (Batch 2024)**

**Subject:** CS-312 Artificial Intelligence

**Instructor:** Mr. Mubashir Iqbal

**Marks:** 40

**Last Date of submission:** 19 Nov 2025

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**GENERAL INSTRUCTIONS FOR Quiz-02**

- 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).
- Draw every possible shape, diagram, graph, and plot.
- Keep your handwriting clean and readable. Underline important terms neatly. Avoid cutting or overwriting.

Course Outcome	Student Outcome
CO-02	SO-01

**Question 01:** Explain these uninformed searching algorithms, Breath First Search, Depth First Search, UCS, IDDFS, and Bidirectional Search. Provide at least one real-world situation where each algorithm fails or performs poorly, and justify why. [20 Marks]

**Question 02:** Use Best First Search to find the optimal path from P → S on given graph. [10 Marks]

**Question 03:** Use A\* Search to find the optimal path from P → S on given graph. [10 Marks]

