

SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

FALL 2021

ARTIFICIAL INTELLIGENCE (CS-316)

Assignment 1

Semester: VI

Due Date: Tuesday 9th November, 2021

Batch: 2019

Max Marks: 04

Instructions:

- Plagiarized assignments will not be considered.
- If you copy any material (say more than a sentence), then give proper reference/credit. Do not copy more than a paragraph from an Internet source: provide the link instead.

[Question] 1.

Iterative Deepening Search is the combination of Breadth-First Search & Depth-First-Search, what benefits do we get in Iterative Deepening Search that lack in Breadth-First Search & Depth-First Search?

[Question] 2

What is one main difference between Depth-Limit-Search & Depth-First-Search that makes Depth-Limit-Search more efficient?

[Question] 3

Solve for Iterative Deepening Search & Depth Limit Search. Consider the search tree shown in Figure. The number next to each edge is the cost of the performing the action corresponding to that edge. You start from the node A. The goal is to reach node G. (Assume depth limit 2 in case of Depth Limit Search).

