### **BRAC UNIVERSITY**

# **Department of Computer Science and Engineering**

Examination: Quiz

Duration: 20 minutes

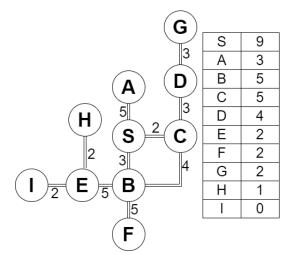
Semester: Fall 2023

Full Marks: 10

## CSE 422: Artificial Intelligence

Name: ID: Section:
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#### Question 1 (CO1)



Considering S as the start node and I as the goal node, **apply** A\* search on the graph given above. **Show** full simulation and path calculation. [7]

Consider the following criteria:

- -When pushing nodes, push in alphabetical order
- -In case of a tie during popping, follow FCFS approach
- -This is a custom graph A\* search and a node only get pushed a second time if previous version of the node had higher f-cost

### Question 2 (CO1)

Create a tree/graph with at least three nodes where the heuristic is consistent. [3]