BRAC UNIVERSITY
Department of Computer Science and Engineering

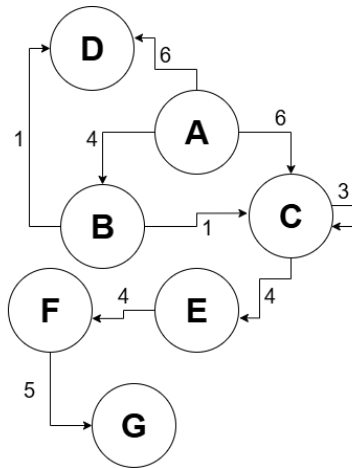Examination: Quiz   Semester: Summer 2025
Duration: 20 minutes   Full Marks: 10

CSE 422: Artificial Intelligence

Name:	ID:	Section:

A	17
B	11
C	10
D	10
E	9
F	4
G	0

Considering A as the start node and G as the goal node, **apply** tree A* search on the graph given above. Show full simulation and path calculation. When inserting multiple nodes in the fringe, push them in alphabetical order. [10]

A17
A17 --> B15 C16 D16
B15 --> C16 D16 C15 D15
C15 --> C16 D16 D15 C18 E18
C16 --> D16 D15 C18 E18 C19 E19
D15 --> D16 C18 E18 C19 E19
D16 --> C18 E18 C19 E19
C18 --> E18 C19 E19 C21 E21
E18 --> C19 E19 C21 E21 F17
F17 --> C19 E19 C21 E21 G18
G18 --> C19 E19 C21 E21