BRAC UNIVERSITY
Department of Computer Science and Engineering

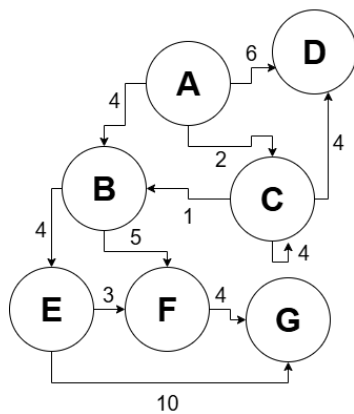Examination: Quiz   Semester: Summer 2025
Duration: 20 minutes   Full Marks: 10

CSE 422: Artificial Intelligence

Name:	ID:	Section:

A	15
B	11
C	11
D	6
E	9
F	8
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]

A15
A15 --> B15 C13 D12
D12 --> B15 C13
C13 --> B15 B14 C17 D12
D12 --> B15 B14 C17
B14 --> B15 C17 E16 F16
B15 --> C17 E16 F16 E17 F17
E16 --> C17 F16 E17 F17 F18 G17
F16 --> C17 E17 F17 F18 G17 G12
G12 --> C17 E17 F17 F18 G17