



Daffodil International
University Faculty of Science &
Information Technology
Department of Software Engineering

Quiz-1, Summer-2026

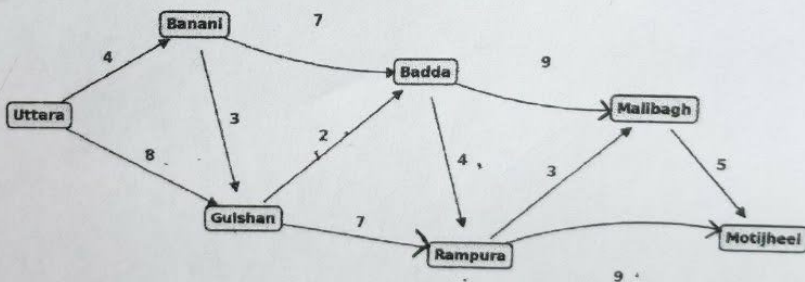
Course Code: SE 333; Course: Artificial Intelligence,
Teacher: NAJ

Time: 30 minutes

Marks: 15

Set-A

Consider the directed graph below showing the city delivery network in Dhaka. Each edge shows the distance between two locations and each node has a heuristic $h(n)$ estimating the remaining distance to the goal. Using the **A* Search Algorithm**, find the shortest path from **Uttara** to **Malibagh**; show the open list and $f = g + h$ at each step, then state the final path and its total cost.



$h(n)$ values:

Node	Uttara	Banani	Gulshan	Badda	Rampura	Malibagh	Motijheel
$h(n)$	20	16	13	11	7	4	0