First Name: Last Name:

Q1: Read the instructions for question Q1 in the assignment document. **For each of the three sub-questions, write your answer to the question in the given space**.

(a):   After the DFS on G, the discovery times for vertices C, F, H are

$C.dsc=$

$F.dsc=$

$H.dsc=$

(b):   After the DFS on G, the finish times for vertices B, E, H are

$B.fin=$

$E.fin=$

$H.fin=$

Carefully read the instruction for each question in the assignment document

(c):   After the DFS on G, th predecessors for vertices D, G, H are

$D.\pi=$

$G.\pi=$

$H.\pi=$

Q2: Read the instructions for question Q2 in the assignment document. **Write your answer related to the adjacency lists of G^T in the given space**.

The first node on the adjacency list of vertex B is

The first node on the adjacency list of vertex C is

The first node on the adjacency list of vertex E is

The first node on the adjacency list of vertex F is

The first node on the adjacency list of vertex G is

The first node on the adjacency list of vertex H is

Carefully read the instruction for each question in the assignment document

Q3: Read the instructions for question Q3 in the assignment document. **For each of the two sub-questions, write your answer to the question in the given space**.

    (a):   After the BFS on G, the distances of vertices D, H from vertex A are

    $D.d=$

    $H.d=$

    (b):   After the BFS on G, the predecessors of vertices D, H are

    $D.\pi=$

    $H.\pi=$

Q4: Read the instructions for question Q4 in the assignment document. **For each of the three sub-questions, write your answer to the question in the given space**.

Carefully read the instruction for each question in the assignment document

(a):   After the DFS on G, the discovery times for vertices C, F, H are

$C.dsc=$

$F.dsc=$

$H.dsc=$

(b):   After the DFS on G, the finish times for vertices B, E, H are

$B.fin=$

$E.fin=$

$H.fin=$

(c):   After the DFS on G, th predecessors for vertices D, G, H are

$D.\pi=$

$G.\pi=$

$H.\pi=$