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NORTH AMERICAN
UNIVERSITY
INSPIRATION INNOVATION GLOBAL COMPETENCE

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Dashboard > COMP > COMP 3317.Algorithms.2016FLL.s1 > 14 November - 20 November
> Networks

Started on Saturday, 3 December 2016, 3:45 PM**State** Finished**Completed on** Saturday, 3 December 2016, 3:50 PM**Time taken** 4 mins 45 secs**Marks** 4.00/5.00**Grade** 80.00 out of 100.00**Question 1**

Correct

Mark 1.00 out of 1.00

Degree of a network is determined by _____ degree of any of its nodes.

Select one:

- ☐ a. median
- ☐ b. smallest
- ☐ c. None of the above
- ☒ d. largest ✓

Your answer is correct.

The correct answer is: largest

Question 2

Correct

Mark 1.00 out of 1.00

In a network it is logical to use _____ to traverse the nodes closer to the starting node first.

Select one:

- ☐ a. Exhaustive Search
- ☐ b. Depth-First Search
- ☒ c. Breadth-First Search ✓
- ☐ d. Heuristic Search

Your answer is correct.

The correct answer is: Breadth-First Search

Question 3

Correct

Mark 1.00 out of 1.00

_____ Algorithm is best suited to find the shortest path between nodes in a network.

Select one:

- ☐ a. Minimax
- ☐ b. Heuristic
- ☒ c. Dijkstra's ✓
- ☐ d. Exhaustive

Your answer is correct.

The correct answer is: Dijkstra's

Question 4

Correct

Mark 1.00 out of 1.00

What is the purpose of the following algorithm?

Boolean: Algo (Node: start_node)

// Traverse the network starting from start_node.

Traverse(start_node)

// See if any node has not been visited.

For Each node In <all nodes>

 If (Not node.Visited) Then Return False

Next node

// All nodes were visited.

Return True

End Algo

Select one:

- ☐ a. Depth-first Traversal
- ☐ b. To find the spanning tree
- ☐ c. To determine whether an undirected network has a cycle
- ☒ d. To determine whether an undirected network is connected ✓

Your answer is correct.

The correct answer is: To determine whether an undirected network is connected


Question 5

Incorrect

Mark 0.00 out of 1.00

Depth-first traversal algorithm implemented for trees might have a problem on networks because of _____.

Select one:

- ☐ a. cycles
- ☐ b. links
- ☐ c. nodes
- ☒ d. missing root 

Your answer is incorrect.

The correct answer is: cycles