

**2019FA ARTIFICIAL INTEL (CS-3387-01)**

Lessons Week 3

## Review Test Submission: Week 3 Quiz

## Review Test Submission: Week 3 Quiz

User	Jecsan Blanco Licano
Course	2019FA ARTIFICIAL INTEL (CS-3387-01)
Test	Week 3 Quiz
Started	9/13/19 9:00 AM
Submitted	9/13/19 9:05 AM
Status	Completed
Attempt Score	80 out of 100 points
Time Elapsed	4 minutes out of 10 minutes
Instructions	Please read carefully. In the multiple choice questions there is only one right answer. If there are other questions, I am giving you the answer in the question!
Results Displayed	All Answers, Incorrectly Answered Questions

**Question 1**

10 out of 10 points



What nodes are first explored in a depth first search

- Answers:
- A. Parent nodes
  - B. All neighboring nodes at certain depth
  - C. Deepest node in the current frontier of the search tree
  - D. Leaf nodes

← OK

10 out of 10 points

**Question 2**

What is the difference between the state and a node

Answers:

A.

A state is a (representation of) a physical configuration; A node is a data structure constituting part of a search tree

B. There is no difference

C.

A state is the representation of the tree; A node is the a node of the tree

D.

A state is a leaf of the tree; A node is the node of the tree

**Question 3**

10 out of 10 points



Does plain hill-climbing search always find the optimal solution

Answers:

A. No, it never finds optimal solution

B. Yes, it overcomes the local optimum

C. No, it can loop on flat optimum

D. Yes, it always finds an optimal solution

**Question 4**

0 out of 10 points



Which node will first be expanded in best first search

Answers:

A. None

B. Parent node

C. Child node

D. The most desirable unexpanded node

**Question 5**

10 out of 10 points



What is the difference between A\* search and greedy search

- Answers:
- A. There is no difference
  - B.  
A\* uses admissible heuristic and a cost so far to reach n while greedy expands the current best node
  - C.  
A\* expands nodes at random greedy expands nodes greedily
  - D.  
A\* expands breadth first greedy expands depth first

### Question 6

10 out of 10 points



What is the basic idea of tree search algorithms

- Answers:
- A. Torture the students
  - B.  
Online exploration of state space by generating successors of already-explored states
  - C. Optimal solution having the tree structure
  - D.  
Offline simulated exploration of state space by generating successors of already-explored states

### Question 7

0 out of 10 points



Is iterative deepening search complete

- Answers:
- A. No
  - B. Depends on the depth
  - C. Depends on the number of nodes
  - D. Yes

### Question 8

10 out of 10 points



What \*\*\*is not\*\*\* a problem type

- Answers:
- A. Conformant (Non-observable) problem
  - B. Simple (everything known) problem
  - C. Single-state (Deterministic, fully observable) problem
  - D. Contingency (Nondeterministic and/or partially observable) problem

### Question 9

10 out of 10 points



What is the solution to the problem for problem solving agents

- Answers:
- A. A solution to the problem is action sequence that leads from initial state to the goal
  - B. A solution to the problem is the goal
  - C. A solution to the problem are the states
  - D. A solution to the problem is the sequence of visited cities

### Question 10

10 out of 10 points



What nodes is breadth-first search exploring first

- Answers:
- A. All parent nodes
  - B. All nodes at the right
  - C. All neighbor nodes at present depth
  - D. All nodes at the left

Friday, September 13, 2019 9:17:22 AM CDT