**CS 4100/5100 - Quiz 1**
**9/12/2013**

1- Depth First Search can be most easily implemented using _____.

A. an array B. a stack C. a priority queue D. all of the above

2- A* search calculates the cost of reaching the goal through some node n by calculating _____.

A- the actual cost of the path from the start node through node n to the goal node

B- an estimated cost of the path from the start node through node n to the goal node

C- the actual cost of the path from the start node to node n and an estimated cost of the path from node n to the goal node

D- the estimated cost of the path from start node to node n and the actual cost from node n to the goal node

3- Iterative Deepening Depth First Search uses ideas from _____ to address the shortcomings of Depth First Search.

A- Breadth First Search

B- Uniform Cost Search

C- Heuristic Search

D- A* search

4- Admissibility means the heuristic gives _____ on the actual cost of reaching the goal.

A. an upper bound B. a tight bound C. a lower bound D. all of the above

5- Uniform Cost Search expands the highest cost node first: _____

A- False B- True

6- One of the major disadvantages of using Depth First Search is _____.

A- exploring too far on a branch that does not have the goal

B- shallowest nodes being expanded first

C- finding a suboptimal path to the goal

D- A and C

7- A heuristic basically means _____ that estimates the cost of reaching the goal.

A. a constant-time function

B. a rule of thumb

C. a probabilistic method

D. an arbitrary decision process

8- Greedy Best First Search expands the furthest node from the goal first.
A – False B- True