CSC384 - Introduction to Artificial Intelligence
Sample Game Tree Search Problems
(Winter 2018)

1 Game Tree Search

1. The following URL provides a great tool for understanding the details of minimax with alpha beta pruning: http://inst.eecs.berkeley.educs61b/fa14/ta-materials/apps/ab_tree_practice/

2. Assume you have come up with a minimax policy after traversing to all the terminals of a game tree. Someone then comes along and doubles the value of every terminal over some threshold. Will you come up with the same policy if you run minimax again? What if someone doubles only values of terminals that are even?

3. Why is minimax search generally not used to play real games?

4. *True or False*: When executing the alpha-beta algorithm on a game tree which is traversed from left to right, the leftmost branch will never be pruned.

5. *True or False*: The alpha-beta algorithm will always result in at least one branch of the game tree being pruned.