Artificial Intelligence 1
Quiz #7 (adversarial search, games)

What is a zero-sum game?

What is the difference between deterministic and stochastic games?

What is a solution of a game?

Define a minimax value for both deterministic and stochastic games.

Do minimax and alpha-beta algorithms always return the same solution?

Is minimax complete and sound algorithm?

Does the minimax algorithm need to reach a terminal state to find a solution?

Does the alpha-beta pruning algorithm need to reach a terminal state to find a solution?

Can we apply the minimax technique to games with more than two players?

Describe some techniques to get an evaluation function.

What is a horizon effect?

Describe difference between “wide but shallow” and “deep but narrow” approaches to tree search.

Is MCTS “wide but shallow” or “deep but narrow” approach?

What is difference between exploration and exploitation?

Order the following games, chess, checkers, go, by the year when a computer program defeated the best human player(s).

What are the differences between Go and Chess from the view of search? Based on that difference, suggest an appropriate technique to play these games.