1 If you were asked to design an agent, what type of agent would you choose and why(2nd)?

2 When solving the eight-puzzle, which one do you choose among depth-first search, width-first search, greedy search, and A* search, please compare and explain why(3,4th).

3 Provide a detailed description of the Genetic Algorithm Search (GA) /SA algorithm. Your answer should include a clear statement of the algorithm and a general description of how it works(5-6th).

4 Explain the strategy of simulated annealing /GA algorithm so that it can avoid stuck in the local extremum.(5-6th)

5 Describe the PEAS of eight-puzzle/8-quenes/wumpus/missionary-savage problem(3rd and Lab 4).

6 Detailed describe your understanding of the definition of artificial intelligence(1st).

7 What is an expert system? What is the general structure of an expert system(22nd)?

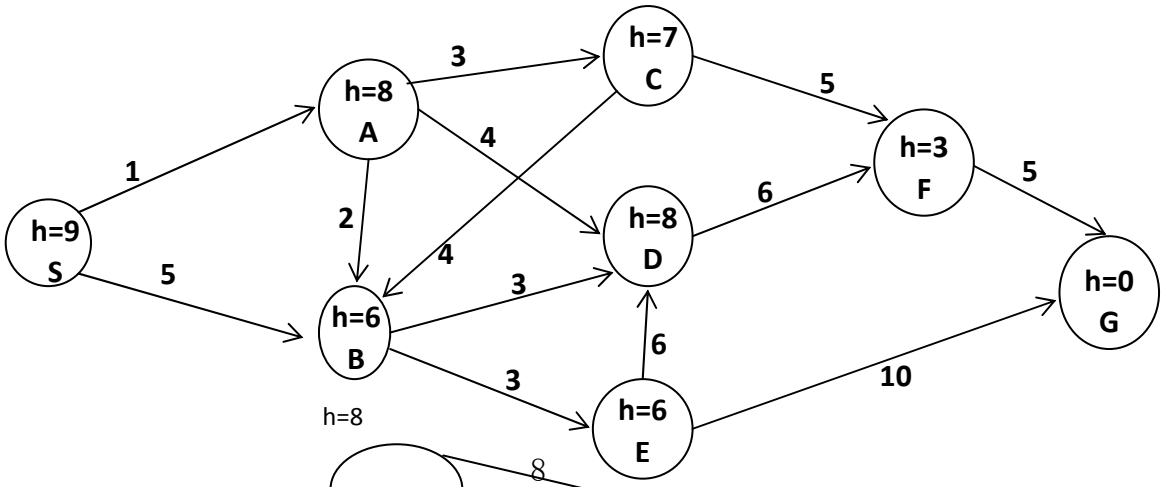
8 For the Wumpus game, List the general steps before you move the next square(11-14,16th).

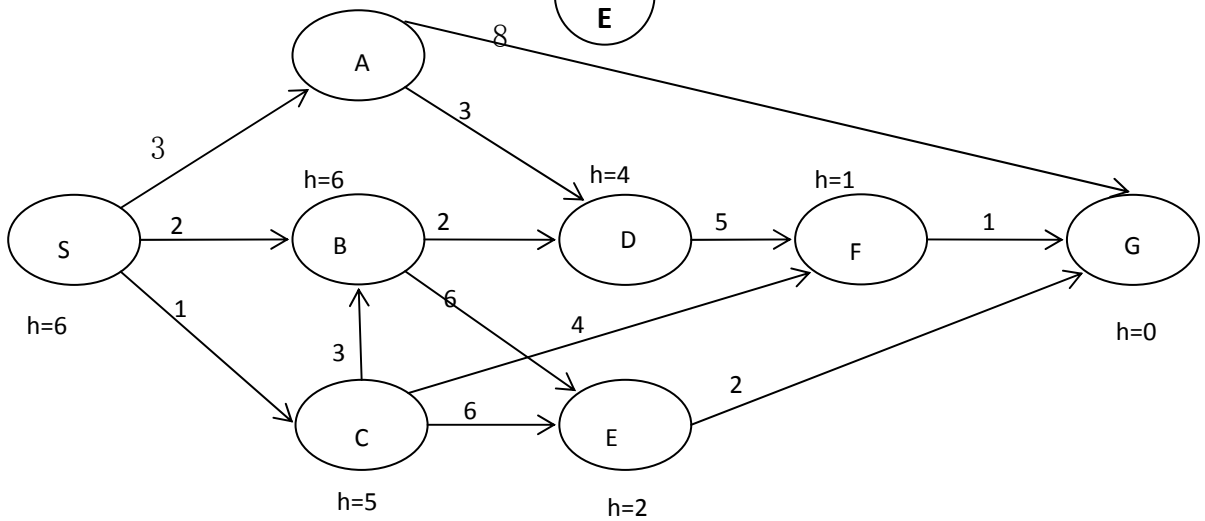
9 When representing the knowledge, which of the following would you choose: semantic network, frame, production, propositional logic or predicate logic and give the reasons(11-14,16th).

10 For wumpus game, Between the forward chaining and backward chaining, which one will you choose and why(11-14,16th).

11 For the adversarial search, why can the computer win us human now? (9th)

12 In this problem the start state is S, and the goal state is G. The transition costs are next to the edges, and the heuristic estimate, h, of the distance from the state to the goal is in the state's node. Assume ties are always broken by choosing the state which comes first alphabetically. What is the order of states expanded using Uniform-Cost Search/Greedy Search/A* search? (4th)





13 The figure below is the game tree of a two-player game; the first player is the maximizer and the

second player is the minimizer. Use the tree to answer the following questions (9th).

14 Consider the multi-layer perceptron shown below. The inputs are Boolean and the network uses hard-limiting threshold units(21st).

Similar questions of 12-14, and some questions among 1-11. So you'd better can do the kind of the problems of 12-14, and I have no answers for 1-11 until now, try to use the slices I have shared with you.

1. 5 Single choice 10 points
2. 5 Short Answer Questions 50 points
3. 3 Calculation questions 40 points