Unit 11 - Week 8: Planning

Assignment 8

The due date for submitting this assignment has passed. **Due on 2019-09-25, 23:59 IST.**
As per our records you have not submitted this assignment.

1) Planning and problem solving methods can often solve the same sorts of problems; However, planning and problem solving are different because of the *1 point*

I. Differences in the representations of goals, states, and actions
II. Differences in the representation and construction of action sequences.
Which of the above statements are correct?

- A. None
- B. Only Statement I
- C. Both Statements I and II
- D. Only Statement II

No, the answer is incorrect.
Score: 0
Accepted Answers:
C. Both Statements I and II

2) Type of planning which involves selecting an action whose preconditions are met until a goal state is reached. *1 point*

- A. Regression Planning
- B. Progression Planning
- C. Plan Space Planning
- D. Graph-based Planning

No, the answer is incorrect.
Score: 0
Accepted Answers:
B. Progression Planning

3) Situation calculus is a dialect of First Order Logic. Which of the following statement holds for situation calculus? *1 point*

- A. Situations and actions are explicitly taken to be objects in the domain.
- B. Only way to represent beliefs about a changing world.
- C. Successor-state axiom specifies truth value of fluent in the current state
- D. All of the above.

No, the answer is incorrect.
Score: 0
Accepted Answers:
A. Situations and actions are explicitly taken to be objects in the domain.

4) STRIPS is an alternative representation to the pure situation calculus for planning. *1 point*

I. Actions are not represented explicitly as part of the world model.
II. Actions are effectively instantaneous.
III. Actions are thought of as operators that syntactically transform world models.
Which of the above statements are correct?

- A. Only Statements I and II
- B. Statements I, II and III
- C. Only Statements II and III
- D. None

No, the answer is incorrect.
Score: 0
Accepted Answers:
B. Statements I, II and III

5) A planner that can represent plans in which some steps are ordered with respect to each other and other steps are unordered is a _____ *1 point*

- A. Linearized Plan
- B. Partial Order Plan
- C. Graph Plan
- D. Total Order Plan

No, the answer is incorrect.
Score: 0
Accepted Answers:
B. Partial Order Plan

6) _____ can solve the Sussman Anomaly. *1 point*

- A. State-Space Planner
- B. Interleaving Planner
- C. Total-order Planner
- D. Non-interleaving Planner

No, the answer is incorrect.
Score: 0
Accepted Answers:
B. Interleaving Planner

7) Plan space planning is also referred to as _____ planning. *1 point*

- A. Action
- B. Nonlinear
- C. Goal-stack
- D. Linear

No, the answer is incorrect.
Score: 0
Accepted Answers:
B. Nonlinear

8) In a planning graph, a pair of mutually exclusive propositions in the same layer is linked through the _____ edge. *1 point*

- A. Mutex
- B. Negative
- C. Positive
- D. Pre-condition

No, the answer is incorrect.
Score: 0
Accepted Answers:
A. Mutex

9) GraphPlan is a two-phase algorithm; Planning Graph Construction followed by Solution Extraction. What did the first stage achieve? *1 point*

- A. Delimiting the search space.
- B. Some kind of reachability analysis on the given problem.
- C. Both A and B above.
- D. None of A and B above

No, the answer is incorrect.
Score: 0
Accepted Answers:
C. Both A and B above.

10) ABSTRIPS greatly reduces search space, and is more efficient at solving large problems. It is a kind of _____ planner. *1 point*

- A. State-space
- B. Regular
- C. Hierarchical
- D. Advanced

No, the answer is incorrect.
Score: 0
Accepted Answers:
C. Hierarchical