

CSCE 580 Spring 2015
QUIZ 4
Assigned Tuesday, 15-02-03

1. What is *mysterious* in the following paragraph? In a(n) *mysterious* algorithm, solution quality improves (or at least never decreases) over time. A(n) *mysterious* algorithm provides a solution even when little time is allocated to its execution; it provides a better solution as more time is allocated to its execution.

Answer: anytime

2. Rank the following representations in order of decreasing succinctness (i.e., start with the most compact representation and end with the least compact one):

- (a) individuals and relations
- (b) explicit states
- (c) features or propositions

Answer: individuals and relations, features or propositions, explicit states

3. Consider State-Space Search. Circle the appropriate choice for each dimension of complexity

Modularity: flat or hierarchical **Answer:** flat

Representation Scheme: explicit states or features or objects and relations **Answer:** explicit states

Planning Horizon: static or finite stage or indefinite stage or infinite stage **Answer:** indefinite stage

Sensing Uncertainty: fully observable or partially observable **Answer:** fully observable

Effect Uncertainty: deterministic or stochastic actions **Answer:** deterministic

Preference: goals or complex preferences **Answer:** goals

Number of Agents: single agent or multiple agents **Answer:** single agents

Learning knowledge is given or learned **Answer:** knowledge is given

Computational Limits: perfect rationality or bounded rationality **Answer:** perfect rationality