

COS 402: Artificial Intelligence

Sample Exam — Answers

Fall 2010

A1. $1, 2, 4, 8, 16, \dots \rightarrow 1, 2, 3, 4, \dots$

A2. admissible \rightarrow consistent

A3. α equals $\beta \rightarrow \alpha$ entails β
 $\alpha \equiv \beta \rightarrow \alpha \models \beta$

A4. complete \rightarrow sound

A5. Markov chain \rightarrow naive Bayes

A6. Markov's rule \rightarrow Bayes' rule

A7. signs \rightarrow phones

A8. quadratic \rightarrow linear

A9. Markov conditions \rightarrow Bellman equations

A10. larger \rightarrow smaller

A11. CORRECT

A12. statistical \rightarrow computational

B1. a, b, f.

B2. b, c.

B3. f.

B4. Given what was covered in class, the independencies that can be inferred are:
a, b, c, d.

B5. a, d.

B6. a, c.

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- C1. B, N, N, B.
 - C2. B, B, S, S, N.
 - C3. H, M, B, M, H.
 - C4. L (or B), D, S, B, L, T, K, K, T.