Bayesian Reasoning Example Exam Questions

1.

Describe what needs to be known to build a Bayesian network.

2.

Describe the benefits of using Bayesian networks.

3.

Describe the difficulties using Bayesian networks.

4.

Define what it means for a pair of nodes to be d-separated or d-conneted.

5.

Given a Bayesian network and a set of evidence nodes be able to state why specified pairs of nodes are d-separated or d-connected.

6.

Describe the conditions under which an evidence set E d-separates nodes A and B. Explain why each condition d-separates the nodes.

7.

Given a Bayesian network and evidence of some events, derive the set of probability equations needed to solve the problem.

8.

Define what is meant by hard evidence.

9.

Define what is meant by soft evidence.