

Chapter 6. Uncertainty Management and Decision Making

1. Describe in short the fundamental aspects of acting under uncertainty.
2. Explain important features and formulas of inference using full joint-probability distribution and Bayes's rule.
3. Cite illustrative examples of inference using full joint-probability distribution, Bayes's rule and joint probability of consistent models.
4. How do you explain the purpose of Bayesian Networks?
5. Explain with a concise example the specification of Bayesian Networks.
6. Explain and illustrate with an example how joint-probabilities are represented and inference is made using Bayesian Networks.
7. Narrate the basic principle of Decision making, and explain how Expected Utility of an action, given some evidence, is calculated.
8. Give an illustrative example of a decision network, and explain how utility of an action is computed and decision is made using a decision network.