**Artificial Intelligence Questions & Answers – Bayesian Networks**

**This set of Artificial Intelligence Multiple Choice Questions & Answers (MCQs) focuses on “Bayesian Networks”.**

1. How many terms are required for building a bayes model?  
a) 1  
b) 2  
**c) 3**  
d) 4  
View Answer

Answer: c  
Explanation: The three required terms are a conditional probability and two unconditional probability.

2. What is needed to make probabilistic systems feasible in the world?  
a) Reliability  
**b) Crucial robustness**  
c) Feasibility  
d) None of the mentioned  
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Answer: b  
Explanation: On a model-based knowledge provides the crucial robustness needed to make probabilistic system feasible in the real world.

3. Where does the bayes rule can be used?  
a) Solving queries  
b) Increasing complexity  
c) Decresing complexity  
**d) Answering probabilistic query**  
View Answer

**Answer: d  
Explanation: Bayes rule can be used to answer the probabilistic queries conditioned on one piece of evidence.**

4. What does the bayesian network provides?  
**a) Complete description of the domain**  
b) Partial description of the domain  
c) Complete description of the problem  
d) None of the mentioned  
View Answer

Answer: a  
Explanation: A Bayesian network provides a complete description of the domain.

5. How the entries in the full joint probability distribution can be calculated?  
a) Using variables  
**b) Using information**  
c) Both Using variables & information  
d) None of the mentioned  
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Answer: b  
Explanation: Every entry in the full joint probability distribution can be calculated from the information in the network.

6. How the bayesian network can be used to answer any query?  
a) Full distribution  
**b) Joint distribution**  
c) Partial distribution  
d) All of the mentioned  
View Answer

Answer: b  
Explanation: If a bayesian network is a representation of the joint distribution, then it can solve any query, by summing all the relevant joint entries.

7. How the campactness of the bayesian network can be described?  
**a) Locally structured**  
b) Fully structured  
c) Partial structure  
d) All of the mentioned  
View Answer

Answer: a  
Explanation: The campactness of the bayesian network is an example of a very general property of a locally structured systems.

8. To which does the local structure is associated?  
a) Hybrid  
b) Dependant  
**c) Linear**  
d) None of the mentioned  
View Answer

Answer: c  
Explanation: Local structure is usually associated with linear rather than exponential growth in complexity.

9. Which condition is used to influence a variable directly by all the others?  
a) Partially connected  
**b) Fully connected**  
c) Local connected  
d) None of the mentioned  
View Answer

Answer: b  
Explanation: None.

10. What is the consequence between a node and its predecessors while creating bayesian network?  
a) Contionally dependant  
b) Dependant  
c) Conditionally independant  
d) Both Contionally dependant & Dependant  
View Answer

Answer: c  
Explanation: The semantics to derive a method for constructing bayesian networks were led to the consequence that a node can be conditionally independant of its predecessors.