**Bayesian Network:**

a graphical model for reasoning under uncertainty where nodes represent variables and arcs represent direct connections among each other.

**Types of Nodes:**

Nodes can be mutually exclusive or exhaustive, meaning that it can only take one type of value at a time. Different types of values include: Boolean node with binary values, ordered values (low, medium, high) and Integral values.

Query Nodes

Evidence

Hidden

**Network Complexity:**

Complexity is determined by the number of arcs that connect all nodes in a Bayesian network.

**Probabilistic Inference:**

it is the process of adding new information to a hypothesis as soon as new evidence is available, this is performed via the flow of information in a network.

**Conditional probability Tables:**

A set of discrete variables with a conditional probability distribution for each node that shows all possible instantiations.

Commo Cause

Common Effect

Compact Representation

Probabilistic Inference

D-Separation

Types of Queries