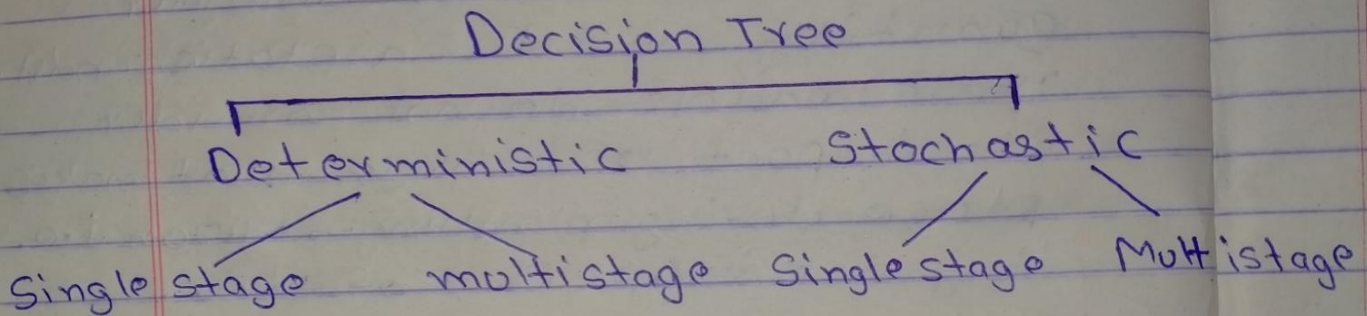


Ans=7

Decision Trees

A decision tree can be deterministic or stochastic and it can be a single stage or multistage one. A multistage tree represents the sequence of decisions over a period of time the classification of decision tree is shown below:



Deterministic Decision Trees:-

A deterministic decision tree shows that each alternative and its possible outcomes are known with certainty. Hence, the decision trees does not contain chance nodes. A single-stage deterministic decision tree involve the making of a single decision i.e. at one point only.

A single stage ~~is~~ deterministic decision tree has no distinct advantages over a payoff matrix.

There is no chance nodes in a multi stage deterministic decision tree also. But, such a decision tree represents the ~~seq~~ sequences of decision to be made.

Stochastic Decision Trees :-

In a stochastic Decision tree we find at least one chance event.

A single - stage stochastic decision tree involves the making of only one decision. The decision problems of this category can be best solved by the formulation of the conditional payoff matrix.

A multistage stochastic decision trees consist of at least one chance event and involves the making of a sequence of the decision. This is also known as the sequential decision tree.