

Q4 → A)

Ans 4 → A)

Distance Vector Routing -

1) It is a dynamic routing algorithm in which each router ~~comp~~ computes distance between itself and each possible destination i.e. its immediate neighbors.

2) It makes use of Bellman ford algorithm for making routing tables.

3) Problems of count to infinity problem which can solved by splitting horizon.

- Good news spread fast and bad news spread slowly.

- Persistent looping problem i.e. loop will be there forever.

Link State Routing -

1) It is a dynamic routing algorithm in which each router shares knowledge of its neighbors with every other router in the network.

2) It makes use of Dijkstra's algorithm for making routing tables.

3 Problems \Rightarrow Heavy traffic due to flooding of packets.

- Flooding can result in infinite looping which can be solved by using time to live (TTL) field.

The reasons for prefer Link State Routing are -

- Based on global knowledge i.e. it have knowledge about entire network.

- Make use of Dijkstra's algo.

- Traffic is more.

- Converges faster.

- No count to infinity problem.

- No persistent loops. only transient loops.

- Practical implementation is OSPF and ISIS.