## **Department of Computer Engineering**

TE: SEM V Subject: CN

## Experiment: 05

**AIM:** Create a network to show different network topologies.(Bus,ring,star,mesh,tree,hybrid topologies).

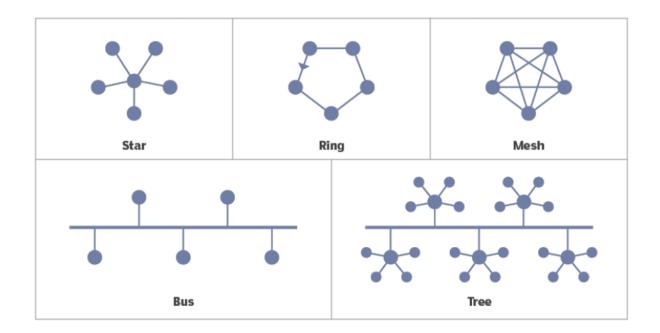
## THEORY:

A network topology is the physical and logical arrangement of nodes and connections in a network. Nodes usually include devices such as switches, routers and software with switch and router features. Network topologies are often represented as a graph.

Network topologies describe the arrangement of networks and the relative location of traffic flows. Administrators can use network topology diagrams to determine the best placements for each node and the optimal path for traffic flow. With a well-defined and planned-out network topology, an organization can more easily locate faults and fix issues, improving its data transfer efficiency.

Following are the types of topologies:

- 1.Bus Topology
- 2. Ring Topology
- 3.Star Topology
- 4. Mesh Topology
- 5. Hybrid Topology
- 6. Tree topology



**CONCLUSION:** In this experiment we have created different networks using different topologies and checked packet transmission using simulation in Cisco packet tracer.