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Network Topology

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Date / /

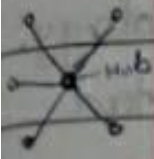
① Network Topology :-

Ans:- Topology refers to the layout of connected device on a network such as.

a) MESH :- Here every device has a point to point link to every other device.

*) It gives privacy & security ∵ If one link gets damage, it won't affect others.

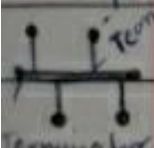
b) STAR :- When device 1 wants to send to device 2, first sends to the data hub. which then relays the data to the other connected device.



*) The transmission are occured only through the central hub ∵ Here the expending is easily done by adding each other.

c) BUS :- 1) A bus topology is multipoint.

2) Here one long cable act as a backbone to link, all the devices are connected to the backbone by drops lines & taps.



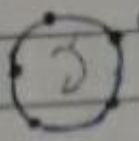
3) Dropline is the connection bet" devices & cable.

4) Tap- is the splitter that cut the main link.

5) This allows only one device to transmit at a time.

6) least expensive way to install a network.

d) RING :- 1) Here each device has a dedicated connection with 2 devices on either side.



2) The signal is passed in one direction from device to device until it reaches the destination and each device have repeater.
3) To add or delete a device requires changing only two connections.

e) Tree :- → Tree topology is one of the most common network setups that is similar to a bus topology and a star topology.

→ A tree topology connects multiple star networks to other star networks.

f) Hybrid : A network which contains all type of physical structure is connected under a single backbone channel.