

44 Lecture - CS501

Important Subjective

1. **What is a communication medium in networking?**

Answer: A communication medium is a physical medium or channel used to transmit data or information between devices on a network, such as copper wires, fiber optics, or wireless signals.

What is a network topology?

Answer: A network topology refers to the physical or logical arrangement of devices and communication channels on a network, such as star, bus, ring, or mesh.

What are the advantages of a star network topology?

Answer: The advantages of a star network topology include easy troubleshooting, centralized management, and a high level of reliability.

What are the disadvantages of a bus network topology?

Answer: The disadvantages of a bus network topology include limited scalability, lower bandwidth, and a single point of failure.

What is the difference between half-duplex and full-duplex communication?

Answer: Half-duplex communication allows for transmission in only one direction at a time, while full-duplex communication allows for simultaneous transmission in both directions.

What is a repeater in networking?

Answer: A repeater is a device used to regenerate and amplify signals in a network, allowing them to travel further distances without degradation.

What is the maximum distance limitation for copper wires in networking?

Answer: The maximum distance limitation for copper wires in networking is 100 meters.

What is the maximum distance limitation for fiber optics in networking?

Answer: The maximum distance limitation for fiber optics in networking is several kilometers.

What is a wireless access point (WAP)?

Answer: A wireless access point (WAP) is a device that enables wireless communication between devices on a network, such as a router or gateway.

What is a hybrid network topology?

Answer: A hybrid network topology is a combination of two or more different topologies, such as a star-bus topology or a mesh-ring topology.