A44`A network is a way of which two devices communicate

Protocols are a set of rules followed while devices communicate

Data encapsulation is the process by which data from a higher network layer is added to that of lower layer from the application to the physical layer of the receiver

The open systems interconnection is one of the network models it has 7 layers:

Application layer, presentation layer, session layer, transport layer, network layer, data link layer, physical layer

And the transmission control protocol/IP excludes the session and transport layer

All these layers have protocols they follow the http and tcp

Every device on a network is called a device or and end device, servers provide information to the end device

Clients are computers that request servers to retrieve information

Peer to peer two devices, bus topology has one main channel for data transmission ,star one central provider of resources to other computers, ring move in a circular direction and hybrid is a combination of two or more topologies

End device is a device where a message originates from or where it is heading

Intermediary device interconnects end devices or makes sure strength of signal doesn’t go down remains constant( regenerate signals, LAN switch, router)

Local area network it spans over a small geographical area while wide area network spans over a wide area e.g. the whole world example includes internet

The internet is the interconnection of devices globally or is the global interconnection of lans and wans

An intranet is a network that enables communication within an organization and outsiders cannot access it

An intranet enhances communication , centralized information

An extranet is a private network that enterprises use to give suppliers-controlled access to business information

Network architecture refers to technologies that support infrastructure that move data across the network

4 characteristics of network architecture fault tolerance, scalability, quality of service, security

Fault tolerance limits the impact of failure by limiting the number of affected devices

Scalability a network should expand easily so that more users are added to the network without impacting the users that are already on

Quality of service

A repeater regenerates the signal so that its strength is not lost

A bridge connects two networks so that they operate as one network

Gateways allow data to flow between networks

Application layer, presentation layer ,session layer , Transport layer, Network layer, datalink layer, Physical layer

Physical layer manages bandwidth of signal, defines how data is sent over physical hardware

Datalink layer sends reliable information over network by detecting and correcting errors