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Subject

Introduction to Telecom

①

Q: name different network topology? and cite an advantage of each type?

Ans: Mesh Topology:

- manages high amounts of traffic, because multiple devices can transmit data simultaneously.

② Star Topology:

- Easy to install and wire
- No disruptions to the network when connecting or removing.

③ Bus Topology

- Easy to connect to a computer or peripheral to a linear bus.

④ Ring Topology

- 1) All data flows in one direction, reducing the chance of packet collisions.

⑤ Hybrid Topology:

- 1) it is extremely flexible
- 2) it is very reliable.

(2)

Q16::

what is the different b/w a physical address, logical address, and a port Address?

Ans:: logical Address::

An ip address of the system is called logical address. This address is the connection of Net ID and host ID. This address is used network layer to identify a particular network (source to destination)

① physical address::

Each system having a nic through which two systems physically connected with each other with cables.

③ port address::

Translation (PAT) is an extension of network address. Translation (NAT) that permits multiple devices on a LAN to be mapped to a ~~single~~ single public ip address to conserve ip add.

(3)

Q1c: How OSI and ISO are related to each other?

Ans: ISO stands for international standards organization which is a multinational organization that tries to standardize network communication protocols at the international level. OSI (open system interconnection) is a model that ISO put together as a networking communication standard.

Q2a) List all four data-signal combinations with the examples.

ANS:	Data	signal	Encoding Technique	Common devices.
	Analog	Analog	Amplitude modulation Frequency mod	Radio Tuner TV Tuner
	Digital	Digital	NRZ-L NRZI Manchester Bipolar-AMI 4B/5B	Digital Encoder

data	signal	(4) Encoding tech	Example
(i) Digital	(Discrete) Analog	Amplitude Shift Keying Frequency Shift Keying Phase Shift Keying	modem
Analog	Digital	Pulse Code Modulation Delta Modulation	Codec

Q2b: • what are the different b/w Repeaters and Amplifiers?

Ans: Repeater takes high input power and provides low output power

Amplifier takes low input power and provides high output power. Repeater regenerates that signal so that the noise can be reduced or eliminated. Amplifier increases the amplitude of the signal with the noise.

(5)

2000 Which layers in the internet model are the network support layers?

Ans: physical, data link link and network layers are network support layers and session, presentation and Application layers are user support layers
