N+ Assignment

Module -1

Q.1 What is network?

->Network is a collection of two or more interconnected devices capable of communicating and sharing resources.

Q.2 Explain type of network-- LAN, MAN, WAN?

->Lan (Local Area Network) covers a small area like a home of office.

->Man (Metropolitan Area Network) spans a city or large campus, connecting multiple Lans.

->Wan (Wide Area Network) covers large geographic areas, like a country or continent, and often includes multiple Mans and Lans.

Q.3 What is Internet?

->Internet is a global communication system that links together thousands of individual networks.

Q.4 Define Network Topologies?

->Network topology is the physical or logical arrangement of nodes, devices, and connection within a network.

Q.5 Define list of cables in use of network—Twisted pair , fiber optics ?

->Twisted pair cables consist of insulated copper wires twisted together to reduce interference.

->Fiber optic cables transmit data as light signals through thin glass or plastic fiber.

Q.6 Straight cable standard sequence 568 A and 568 B ?

->568A Wiring Sequence:

1. White/ Green
2. Green
3. White/ Orange
4. Blue
5. White/ Blue
6. Orange
7. White/ Brown
8. Brown

-> 568B Wiring Sequence:

1. White/ Orange
2. Orange
3. White/ Green
4. Blue

5. White/ Blue

6. Green

7. White/ Brown

8. Brown

Q.7 What is fiber optics module and fiber connector ?

-> A Fiber optic module and a Fiber connector are distinct components in a Fiber optic communication system.

Q.8 Explain Switch ?

-> Switch is a device that connects multiple devices together in a network, allowing them to communicate with each other.

Q.9 Explain Router ?

-> A router is a device that acts like a traffic director for your internet connection.

Q.10 Explain MODEM ?

-> A modem is a device that allows computer, smartphone, tablets, and other devices to connect to the internet.

Q.11 What is unicast multicast and broadcast?

-> Unicast, multicast, and broadcast are three different ways to send data over a network, each with its own purpose and characteristics.

Q.12 What is OSI model?

-> The OSI (Open System Interconnection) model is a conceptual framework that standardizes how different computer systems communicate over a network.

Q.13 What is port number?

-> A port number is a 16-bit unsigned integer (ranging from 0 to 65535) that acts as a communication endpoint for application on a networked device.

Q.14 Difference between TCP V/S UDP communications What is session development?

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TCP	UDP
->Transmission control protocol.	->User datagram – protocol
->Connection oriented	->Connection Less
->Supports Ack's	->No support for Ack's
->Reliable Communication	->Unreliable communication
->Slower data Transportation	->Faster data Transportation
->Protocol No is a	->Protocol No is 17
Eg: HTTP,FTP,SMTP	Eg: DNS,DHCP,TFTP

Q.15 What is flow control?

-> Flow control is a mechanism to manage the rate of data transfer between two devices, ensuring the receiver isn't overwhelmed by the sender.

Q.16 What is the difference between TCP IP model and OSI model?

->The OSI model is more of a conceptual guide, whereas the TCP/IP model is actually implemented in network.

Q.17 What is arp broadcast?

-> Broadcast is a type of network communication where a device sends out a message to all devices on a local network (LAN) to find the MAC address associated with a specific IP address.

Q.18 What is mac-address?

-> MAC address, or Media Access Control address, is a unique identifier assigned to network inter-faces for communication on a network segment.

Q.19 What is a firewall to use for?

-> A firewall is used to protect a computer or network from unauthorized access.

Q.20 Wireless router configure for internet connection and wireless security ?

->To set up your wireless router, physically connect the router to your modem and power, then access its IP address (192.168.1.1) into a web browser. Configure the internet

connection by entering your ISP’s details, set a unique Wi-Fi network name and a strong password using WPA3 OR WPA2 encryption, and change the default administrator password and update the router’s firmware for better security.

Q.21 what is wireless access point? And what is wireless extender?

->A wireless access point creates a wireless network by connecting wireless devices to a wired network, acting as a bridge to the internet.