ASSIGNMENT-2ND
DATA COMMUNICATION

1. What are the different types of networks?

Ans. Below are seven common types of networks, along with their benefits and use cases.

- Personal area network. A personal area network (PAN) is the smallest and simplest type of network. ...
- Local area network. ...
- Metropolitan area network. ...
- Campus network. ...
- Wide area network. ...
- Content delivery network. ...
- Virtual private network**.**

2. Explain the Shielded twisted pair (STP) and Unshielded twisted pair(UTP)

Ans. STP and UTP Cables

Shielded twisted pair cable (STP) has the individual pairs of wires wrapped in foil, which are then wrapped again for double protection. Unshielded twisted pair cable (UTP) has each pair of wires twisted together. Those wires are then wrapped in tubing without any other protection.

3. What is difference between baseband and broadband transmission?

Ans. The prior difference between baseband transmission and broadband transmission is that in the baseband transmission the whole bandwidth of the cable is utilized by a single signal. Conversely, in the broadband transmission, multiple signals are sent on multiple frequencies simultaneously using a single channel.

4. What is the difference between a hub, modem, router and a switch?

Ans. 1. Hub belongs to layer 1 of an OSI model that means it is a physical layer device. Switch belongs to layer 2 of an OSI model that means it is a data link layer device. Router belongs to layer 3 of an OSI model that means it is a network layer device.

5. When you move the NIC cards from one PC to another PC, does the MAC address gets transferred as well?

Ans. 74) When you move the NIC cards from one PC to another PC, does the MAC address gets transferred as well? Yes, that's because MAC addresses are hard-wired into the NIC circuitry, not the PC. This also means that a PC can have a different MAC address when another one replaced the NIC card.

6. When troubleshooting computer network problems, what common hardware-related

problems can occur?

Ans. Most common hardware related problems are PaBX, LAN Card, WLAN Card and Wi-Fi AP if it is wireless, Cables, Switches, Routers and Wireless Controllers. Most problems are hardware related, a faulty power cable or power supply unit. Sometimes RAM needs to be upgraded or VGA cable is not properly connected.

7. In a network that contains two servers and twenty workstations, where is the best place

to install an Anti-virus program?

Ans. In a network that contains two servers and twenty workstations, where is the best place to install an Anti-virus program? The best solution is to install anti-virus on all the computers in the network.

8. Define Static IP and Dynamic IP? Discuss the difference between IPV4 and IPV6.

Ans. What is the difference between a dynamic and static IP address? When a device is assigned a static IP address, the address does not change. Most devices use dynamic IP addresses, which are assigned by the network when they connect and change over time.

9. Discuss TCP/IP model in detail.

Ans.TCP/IP Reference Model is a four-layered suite of communication protocols. It was developed by the DoD (Department of Defence) in the 1960s. It is named after the two main protocols that are used in the model, namely, TCP and IP. TCP stands for Transmission Control Protocol and IP stands for Internet Protocol.

10. What is a Web Browser (Browser)? Give some example of browsers.

Ans. "A web browser, or simply 'browser,' is an application used to access and view websites. Common web browsers include Microsoft Edge, Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.

11. What is a search engine? Give example.

Ans. A search engine is a web-based tool that enables users to locate information on the World Wide Web. Popular examples of search engines are Google, Yahoo!, and MSN Search.

12. What is the Internet & WWW? What are the uses of internet in our daily life?

Ans. The internet offers a collection of important services and resources that are essential to daily living. By utilizing the internet, people are able to progress in almost all spheres of life. As it's a worldwide organization of the computer network, it can link people from all over and create communities.

13. What is an Internet Service Provider? Give some example of ISP in India.

Ans. An Internet Service Provider (ISP) is a company such as AT&T, Verizon, Comcast, or Spectrum that provides Internet access to companies, families, and even mobile users. ISPs use fiber-optics, satellite, copper wire, and other forms to provide Internet access to its customers.

14. Discuss the difference between MAC address, IP address and Port address.

Ans. The primary use of a MAC address is to ensure the physical address of a given device/ computer. The IP address, on the other hand, defines a computer's logical address. The MAC address primarily operates on the data link layer. The IP address primarily operates on the network layer.

15. How do we view my Internet browser's history?

Ans. View & delete your Chrome browsing history

1. On your Android phone or tablet, open the Chrome app .
2. At the top right, tap More. History. If your address bar is at the bottom, swipe up on the address bar. ...
3. To visit a site, tap the entry. To open the site in a new tab, touch and hold the entry. At the top right, tap More.