

Assignments - 2

Q1) What are the different types of network?

Ans = Network

A Network consists of two or more computers that are linked in order to share resources (such as printers and CD's), exchange files, or allow electronic communications. The computers on a network may be linked through cables, telephone lines, radio waves, satellites, or infrared light beams.

Seven types of networks and their use cases

- Personal area network

Personal area network (PAN) is the smallest and simplest type of network. This type of network is designed to enable device in a small office or

home office (SOHO) Environment
to office communicate and
Share resources, data and
applications either wired or
wirelessly.

Local Area Network (LAN)

A local area network (LAN)
consists of a series of computers
linked together to form a
network in a circumscribed
location. The computers in a
LAN connect to each other
via TCP/IP ethernet or wifi.
A LAN TCP/IP is normally
exclusive to an organization
such as a school, office
association or church.

2. Wide area Network (WAN)

A wide-area network (WAN)
is the technology that connects
and your office, data centers,
cloud applications and cloud
storage together. It is called
a wide-area network because
because it spans by and is

single building or large campus
 in include multiple locations.
 spread across a specific geographic
 area or even the world

4 Wireless local area Network (WLAN)

A wireless LAN is a wireless
 computer network that links
 two or more devices using
 wireless communication to form
 a local area network (LAN)
 within a limited area such
 as a home, school, computer
 laboratory, campus, or of office
 building

campus Area Network

A campus network, campus
 area network corporate area
 network made up of an computer
 inter connection of local area
 network within a limited
 geographical area wikipedia

6 Storage Area Network

A storage area network (SAN) is a dedicated network that is used to connect servers, storage systems, and networking switches. It combines servers, storage systems, networking switches, software and services.

Q2. Explain the shielded twisted pair (STP) and unshielded twisted pair (UTP)?

Ans Shielded twisted pair (STP)

Shielded twisted pair (STP) is a special kind of copper telephone and local area network (LAN) wiring used in some business installations. It adds an outer covering or shield that functions as a ground to ordinary twisted pair wiring.

Unshielded Twisted pair (UTP)

UTP is a ubiquitous types of copper cabling used in telephone wiring and local area network (LANs).

There are five types of UTP cables, identified with the prefix Cat CAT, as in category each supporting a different amount of bandwidth.

Q.3 What is difference between base band and broadband transmission.

Baseband

Broadband system use modulation techniques to reduce the signal codes like NRZ, RZ, manchester, biphase - M code, etc called baseband transmission.

Broadband

Broadband

Base band Baseband is digital signal transmitted on the medium using one of the signal codes like NRZ, RZ, Manchester, biphas - M code called baseband transmission.

Broadband Broadband systems use modulation techniques to reduce the effect of noise in the environment. Broadband transmission employs multiple channel unidirectional transmission using a combination of phase and amplitude modulation.

These are the following differences between Broadband and Baseband.

Baseband	Broadband
1. Digital signaling	Analog signaling
2. Frequency division	The transmission of data

Baseband

Broadband

1. In baseband transmission the type of signaling used is digital

In broadband transmission the type of signaling used is analog.

2. Baseband transmission is bidirectional in nature

Broadband transmission is unidirectional in nature

3. The signals to be sent in both directions.

Sending of signal in one direction only

4. It works well with bus topology

It is used with a bus as well as tree topology.

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

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

Dynamic IP Address

An dynamic IP address that you can use for a limited time.

If a dynamic address is in use, it can be allocated to address another device automatically. DHCP or PPPoE are used to assign dynamic IP address.

Difference between Static and Dynamic IP Address

Static IP Address	Dynamic IP
1. Internet Service provide. It provides the static IP Address	DHCP is used generate dynamic IP Address
2. Static IP Address does not get changed with time	Dynamic IP Address can be changed any time
3. Static IP Address is less secured.	Dynamic IP Address being variable in nature & is less risky

4. Device using static IP Address can be traced easily

Device using dynamic IP Address is difficult to trace.

IPv4 is composed of 32-bit address length and is the fourth version of the Internet protocol (IP). IPv6 is composed of 128-bit address length and is the latest updated version of the Internet protocol (IP)

Difference between IPv4 and IPv6 Address

Here is the main difference between IPv4 and IPv6.

IPv4

IPv6

1 IPv4 is a 32-Bit IP Address

IPv6 is 128 Bit IP address

IPv4 is a numeric address and its binary bits are separated by a dot (.)

IPv6 is an alphanumeric address whose binary bits are separated by a colon (:). It also contains hexadecimal.

There are 10 examples of web browsers, which are given below.

1. Internet Explorer
2. Google Chrome
3. Mozilla Firefox
4. Safari
5. Opera
6. Konqueror
7. Lynx
8. Tor Browser
9. UC Browser
10. Brave Browser

Q. 10. What is a Search Engine?
give Example.

Search Engine

A Search Engine is a soft ware program, which designed to perform web searches on the World Wide Web (W.W.W) you call the Search Engine as an answering Machine. Search Engines discover, process and organize internet content and provide it to users when searching for any information.

A Searching Engine is a web based tool that is used by people to locate information on the internet. Some of the most popular Example of Search Engines are Google, Bing, yahoo & MSN Search.

Google is the most used Search Engine world wide with a 92. percent market share in mid - 2019 - Google may be one of the most popular Search Engines but there are many more alternative search

Engines available for a users.

Top search Engines alternative to Google.

- | | | | |
|----|----------------|----|--------------|
| 1 | Bing | 2 | Duck Duck Go |
| 3 | Ecosia | 4 | Ecosia |
| 5 | Wiki.com | 6 | Swisscows |
| 7 | Yahoo | 8 | Uribixu |
| 9 | CC Search | 10 | XANDer |
| 11 | gibizer O.Want | 12 | ASK |
| | ASK | | Disconnect |

Q11 What is the Internet & WWW? What are uses of internet in our daily life?

Ans Internet

A global system of interconnected computers, using a standardised Internet protocol suite for communication and sharing information is called the Internet

World wide web (WWW)

The World wide web, commonly known as the web is an information system enabling documents and is an information system enabling documents and other web resources to be accessed over the Internet.

Today, the internet has become unavoidable in our daily life. Appropriate use of the internet makes our life easy, fast and simple. The internet helps us with facts and figures.

Importance of Internet for our life -

- 1 Uses of the Internet in Education
- 2 Internet use to speed up daily
- 3 Use of the Internet for shopping
- 4 Internet for Research & Development
- 5 Business promotion and Intra
- 6 communication
- 7 Digital transactions
- 8 Money Management.

Q12 What is an Internet service provider? Give some Example of ISP in India.

Ans An ISP is a company that provides individuals and organizations access to the internet and other related services. An ISP has the equipment and the telecommunication firm access equipment to have a point of presence on the internet for the geographic area served.

Example ISP in India

1. Airtel India
2. Beam fiber
3. Bharti Airtel
4. Bharti Enterprises
5. BSNL Broad-band
6. DEN Network
7. idea cellular
8. Jio
9. Mahanagar Telephone Nigam
10. MTSM - Blaze
11. Sancharnet
12. Siti cable

Date ___/___/___

- 13 Spacenet
- 14 Space Telecom
- 15 Tata Teleservices
- 16 Ticom Digital Network
- 17 Uninor
- 18 Videocom
- 19 Vodafone India
- 20 You Broadband

Q13 Discuss the difference between MAC address, IP address, and port address.

Ans An IP address is a 4 Byte identifier, that identifies your internet access in a world wide unique unique fashion. It is like home address of your house. It is used by the internet router to deliver a data packet to your house. In arabic numbers IP address (Version 4 - there is also a new standard, version) are show as a.b.c.d where a, b, c, and d, are integers between 0 and 255.

A mac address is an identifier

of your computer's network access. It is imprinted by your computer's manufacturer on the network card and is manufacturer-specific Mac address. used to be unique to a device, but that is long gone. Strictly speaking they are needed inside a local area network for direct delivery of a packet from one machine to another one directly connected. Inside a LAN they must be unique.

A port address is an identifier (16 Bit, integer up to 65535) that identifies the packet received application on your machine to deliver the packet received by the network card to. In the analogy of the house address this is your or another person name living in that house, so that the delivery can be completed.

Q14 How do we view my internet browser's history?

Ans Android phone or tablet run Google Chrome -

1. open the Google Chrome internet browser
2. In the upper-right corner of the screen, tap the icon
3. In the drop-down menu that appears, select history, and shown in the image.
4. The page that opens contains your device's history -