

CCA-102 Data Communications ASSIGNMENT-2

1:- what are the different types of networks.

Ans:- There are the different types of networks such as LAN (Local area network) is the limited area network within 1 to 2 kilometer LAN is also called ethernet connected with wire and wire less. WAN (wide area network) is also called internet, that connected one to another network with wire or wireless.

Type of WAN -

1:- Inter prize WAN 2:- global WAN MAN (Metropolitan area network) A MAN is a network geographic area such as entire city

As the number of connected personal and IoT device and other connected device used different types of network such as

1:- CCAN 2:- BPN 3:- EPN 4:- SAN 5:- BAN
6:- PAN

2:- Explain the shielded twisted pair (STP) unshielded twisted pair (UTP)?

Ans:- STP

UTP

i:- STP has a metal

UTP does not have a metal foil covering

ii:- STP gives better resistance to electromagnetic interference as compared to UTP

UTP does not provide better resistance to electromagnetic interference as compared to STP.

iii:- STP is little expensive than UTP

UTP is less expensive than STP.

iv:- Grounding is possible.

Grounding is not possible.

v:- possibility of crosstalk is less as it resist to EMT

possibility of crosstalk more as it provide less resistance to EMT

vi:- Distance travelled is large and can be used in MAN

distance travelled is less and used in LAN.

3:- what is difference between baseband and broadband transmission?

Ans

Baseband

It refers to a communication channel in which information is carried in digital form.

Broadband

The signals are modulated as radio frequency analog waves that use different frequency ranges.

ii:- Communication is bidirectional which means the same channel is used to transmit and receive signals.

Communication is unidirectional meaning two different channels are needed in order to send and receive signals.

iii:- Every device on a base band system shares the same channel.

Multiple independent channels can carry analog or digital information through FDM.

iv:- Baseband LANs are inexpensive and easier to install and maintain. Broadband systems are generally more expensive because of the additional hardware involved.

Baseband LANs have a limited distance reach which is no more than a couple miles. Broadband LANs span much larger distances than baseband. Up to tens of kilometers.

4:- When you move the NIC cards from one PC to another PC, does the MAC address get transferred as well.

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

5:- When troubleshooting computer network problems, what common hardware-related problems can occur.

Ans:- To understand the question in the event that there are problems in computer network there are problems with the material such as the network card if it is defective or it is not installed only the network cable not good, the connection between the connection and the cable is not good, if there are two or more ports to take the same name or the same IP address.

5:- In a network contains two servers and twenty workstations, where is the best place to install an anti-virus program?

Ans:- An anti-virus program must be installed on all servers and workstation to ensure protection that's because individual users can access any workstation and introduce a computer

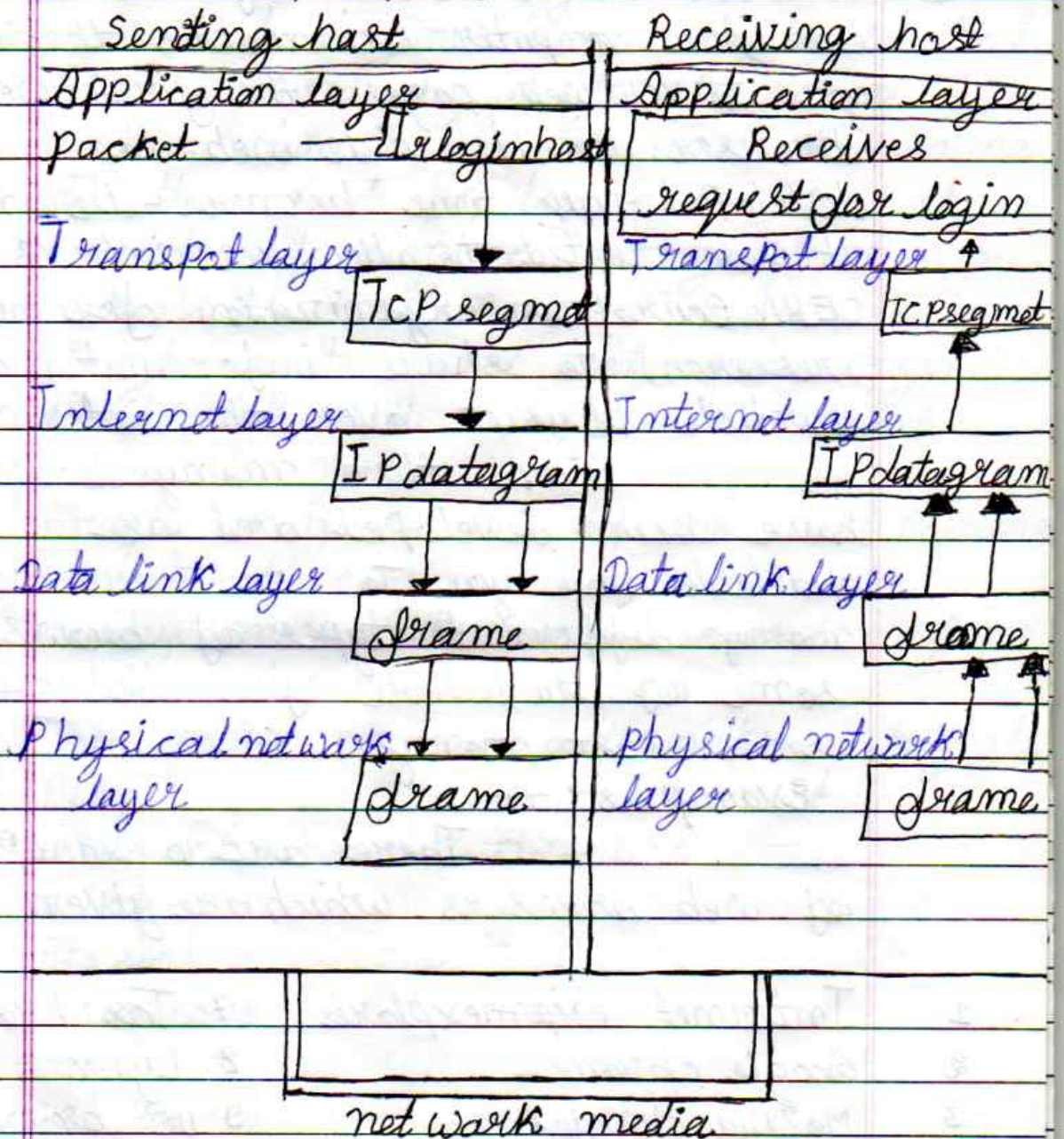
virus when plugging in their removable hard drives are flash drives.

7:- Define static IP and dynamic IP? discuss the difference between IPV4 and IPV6.

Ans:-

STATIC IP ADDRESS	DYNAMIC IP ADDRESS
i A permanent numeric address manually assigned to a device in the network.	A temporary IP address that is assigned to a device or a node when it is connected to a network.
ii:- Assigned manually by the network administrator.	Assigned by the DHCP server automatically.
iii:- Does not change once it is assigned to a device.	change each time the device connects to the network.
iv:- Suitable for dedicated service such as mail, FTP and VPN servers.	suitable for a large network that requires internet access to all devices.
v:- Assigning is difficult.	Assigning is easier.
vi:- Less secure.	more secure.

8:- Discuss TCP/IP model in detail.



9:- what is a web browser (browser)? give some example of browsers.

Ans:- A web browser is the software installed on your computer or mobile that allows you to view web pages. The first web browser, World Wide Web, was developed by Tim Berners-Lee in 1990. It was created to allow researchers at CERN (European Organization for Nuclear Research) to share information about particle physics over the internet.

Since then many browsers have been developed and are available for you to use. There are many different types of browsers. Some of them are free and some cost money.

Examples:-

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

- | | | | |
|---|-------------------|----|---------------|
| 1 | Internet Explorer | 7 | Tox browser |
| 2 | Google Chrome | 8 | Lynx |
| 3 | Mozilla Firefox | 9 | UC browser |
| 4 | Safari | 10 | Brave browser |
| 5 | Opera | | |
| 6 | Konqueror | | |

Q 10 what is a search engines? Give examples.

Ans: A search engine is a web based tool that is used by people to locate information on the internet some of the most popular examples 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 engine but there are many more alternative search engines available for users

Top search engines alternative to google.

i:- Bing

xi:- Disconnect

ii:- Duck Duck Go

xii:- ASK

iii:- Wiki.com

iv:- Ecosia!

v:- Swisscows

vi:- Yahoo

vii:- CC search

viii:- Gibir

ix:- Qwant

x:- yandex

11:- what is the internet & www? what are uses of internet in our daily life?

Ans:- INTERNET

WORLD WIDE WEB

1:- A global system of interconnected computer networks that use the TCP/IP protocol to link devices world wide

online content that is formatted in HTML and accessed via HTML protocol

A massive interconnection of computer networks around the world

service provided by the internet

uses transmission control protocol/ internet protocol (TCP/IP)

uses hyper text transfer protocol (HTTP)

- (1) Education
- (2) Business
- (3) Banking

- (4) Research
- (5) Emails
- (6) Social media
- (7) Finance and accounting
- (8) Cashless transactions
- (9) E-commerce
- (10) online orders and books
- (11) Recharges/bill payments
- (12) E-ticketing
- (13) Job search
- (14) file transfer
- (15) advertising marketing
- (16) Broadcasting
- (17) E-paper news
- (18) Blogging and publishing
- (19) Entertainment
- (20) Gaming
- (21) Navigation
- (22) Home

12:- What is an internet service provider?
Give some example of ISP in India.

Ans:- An internet service provider is an organization that provides services for accessing, using, or participating

in the internet, internet service providers can be organized in various forms, such as commercial community owned, non-profit, or otherwise privately owned.

Airtel india

Beam fiber

Bharti airtel

Bharti enterprises

BSNL broadband

DEN networks

Idea Cellular

Jio

Mahanagar telephone nigam

MTS M-blaze

Sancharnet

Siti cable

Spectranet

Spice telecom

Tata teleservices

Tikona digital networks

uninor

Videocon

Voda phone india

you broadband

Q. 13:- 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 fashion. It is like the 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 6) are shown 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 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's name living in that house. so that the delivery can be complete.

14:- How do we view my internet browser history?

Ans:- Android phone or tablet running google chrome -

Open the google chrome internet browser.

in the upper-right corner of the screen tap the icon.

In the drop-down menu that appears, select history and shown in the image.

The page that opens contains your device's history.

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