

Experiment

Assignment - 102

Date:

Data Communication

Ques 1) What are the different types of network

Ans → (1) Personal Area Network (PAN)  
(2) Local Area Network (LAN)  
(3) Wide wireless local area network  
(WLAN)

(4) Campus Area Network (CAN)  
(5) Metropolitan Area Network (MAN)  
(6) Wide Area Network (WAN)  
(7) Storage Area Network (SAN)  
(8) System - Area Network (also known as SAN)

Ques 2) Explain the shielded twisted pair (STP) and unshielded twisted pair (UTP)

Ans → SHIELDED TWISTED → Shielded twisted pair cable (STP) has the individual pairs of cores wrapped in foil which are then wrapped again for double protection.

• UNSHIELDED TWISTER → unshielded twisted pair cable (UTP) has pair of wires twisted together these are then wrapped in tubing without any other

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Q3) What is difference between baseband and broadband transmission?

Sol 3 Broad band  $\Rightarrow$  System use modulation techniques to reduce the effect of noise in the environment. Broadband transmission employs multiple channel unidirectional transmission using combination of phase and modulation.

Base Band  $\Rightarrow$  If a digital signal is transmitted on the medium using one of the signal codes like NRZ, RZ..

S.No	Baseband transmission	Broadband transmission
(1)	In baseband transmission type of signalling used is digital.	(1) In broadband transmission the type of signalling used is analog.
(2)	Baseband transm. is bidirectional in nature.	(2) Broadband transmission is unidirectional in nature.
(3)	It works well jus. as tree topology.	(3) It is used with a bus.

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Ques4 → What is the difference between a modern router and a switch?

Ans → (1) HUB → Unlike switched, broadcast a data to all ports, which is inefficient so hubs are a multi port repeaters.

(2) MODEM → Stands for Modulator are hardware devices - allow a computer another device as a router or switch to connect to the internet. They convert or modulate.

(3) ROUTER → They use the MAC address of a to send data only to the port the destination device is allowed a computer another device as a router.

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Ques: → When you move the NIC card from one PC to another PC does the MAC address gets?

Ans: → MAC addresses are burned into the NIC card and transfer with the network adapter.

(1) Having said that I can't think of an even modern of that if I don't let you change it to whenever you want in this configuration of the device I have changed MAC address of computer many times over the years.

(2) A software license to a particular MAC address. Because you can easily change it. If I want to move into a new server I am just change a company.

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Ques6 => When troubleshooting computer network problems what common hardware-related problems consider?

Ans => A large percentage of a network is made up of hardware. Problems in these can range from malfunctioning hard drives broken NICs and even hardware startups.

Ques7 => In a network that 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 workstations to ensure protection. That's because users can access any workstation and introduce a computer virus when plugging in their removable hard drive or fast device.

Ques8 => Discuss TCP/IP model in detail.

Ans => Introduction to the TCP/IP Model  
The TCP/IP model is a part of the internet protocol suite. This model acts as a communication protocol for computer networks and connects parts on the Internet. It is a concise,

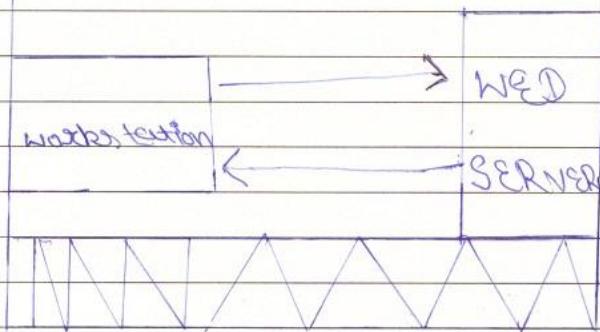
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Ques → Define static IP and dynamic IP, discuss the difference between IPv4 and IPv6?

Ans →

STATIC IP ADDRESS



Ques → What is a web Browser (Browser)? Example

Ans → A web browser or browser for short is a computer software application that allows a person to locate, retrieve, and display content such as Web pages, images as well. Browsers work because every web page image and video on the web page image have unique uniform location (URL) allowing the browser to

Example of Browsers → Internet explore  
Google chrome Mozilla fire fox Safari etc.

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Ques 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.

Ques 12) What is the internet www ? What are the uses of internet in our daily life ?

Ans) There are many uses of the Internet; however, the uses of the Internet in our daily life depends on individual requirements and goals.

- Uses of the Internet in education.
- Internet uses to speed up daily tasks.
- Use of the Internet for shopping.
- Internet for Research development.
- Digital transactions.

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Date :

(13)

Ques => what is an internet service provider?  
give some example ISP in india.

Ans => the example of some internet service provider are Hathway BSNL, Tata teleervices, verizon, Reliance Jio, ACT Fibernet and many more working in india as well as worldwide. The several services provided by them are internet transit and access, domain name registration, web hosting and colocation.

(14)

Ques => Discuss the difference between MAC address, IP address and port address?

Ans => The main difference between MAC and IP address is that, MAC address is used to ensure the physical address of computer. It uniquely identifies the devices on a network. while IP address are used to uniquely identifies the connection of network with that device take part in a network.

(15)

Ques (1) Open the Google Chrome internet browser.  
(2) in the upper-right corner of the.  
(3) in the drop-down menu that appears.  
(4) the following page contains your device history.