

Unit No	Unit Name	Marks
2	Database Query using SQL	25
3	Introduction to Computer Networks	10
	Total	35

Types of networks

1) LAN

2) WAN

3) MAN

Types of network devices

- 1) Modem
- 2) Ethernet card
- 3) Repeater
- 4) Hub
- 5) Switch
- 6) Router
- 7) gateway

NOTES:-

Network addresses

- 1) **IP** :- IP address, also known as Internet Protocol address, is also a unique address that can be used to uniquely identify each node in a network
- 2) **MAC** :- MAC stands for Media Access Control. The MAC address, also known as the physical or hardware address, is a unique value associated with a network adapter called a NIC.

Network topologies

The arrangement of computers and other peripherals in a network is called its topology. Common network topologies are Mesh, Ring, Bus, Star and Tree

Mesh Topology

Each communicating device is connected with every other device in the network.
This topology is also more secure as compared to other topologies

Ring Topology

In ring topology each node is connected to two other devices, one each on either side. The link in a ring topology is unidirectional

Bus Topology

In bus topology each communicating device connects to a transmission medium, known as bus. Data sent from a node are passed on to the bus and hence are transmitted to the length of the bus in both directions

Star Topology

In star topology ,each communicating device is connected to a central node, which is a networking device like a hub or a switch. Star topology is considered very effective, efficient and fast as each device is directly connected with the central device

Tree Topology

A tree topology is a special type of structure where many connected elements are arranged like the branches of a tree.

Mac Address

MAC stands for Media Access Control. The MAC address, also known as the physical or hardware address, is a unique value associated with a network adapter called a NIC

ADD NOTES:-

Difference between **WebSite** and **WebPage**

Website

Webpage

Website is a collection of webpages displayed on the web with a client-like browser.

It is part of website that includes information and content and is displayed on the browser to user or visitor.

It contains more than one web webpages that contain information.

It is a single document display on the browser.

It is a combination of webpages created using HTML and CSS.

Information is usually written in HTML language.

It is a place used to display content.

It is content displayed on the website.

Website

It requires more time to develop the website as compared to webpages.

It includes content about several entities.

It can be accessed using HTTP, DNS (Domain Name System) Protocols.

There is no such extension included in the URL of the a website.

It is quite hard and complex to create the structure of the website and its programming.

Webpage

It requires less time to develop a webpage as compared to the website.

It includes content or information about a single entity.

It can be accessed through web browser.

URL of webpage include extension.

It is quite easy and simple to develop webpage after website structure is being created.

Website

Webpage

It can be accessed using HTTP, DNS (Domain Name System) Protocols.

It can be accessed through web browser.

There is no such extension included in the URL of the a website.

URL of webpage include extension.

It is quite hard and complex to create the structure of the website and its programming.

It is quite easy and simple to develop webpage after website structure is being created.

It includes webpages, related content, and hyperlinks.

It might include text, graphics, hyperlinks, etc.

They are used to establish credibility as business and also to increase the positive impression about the company or business that in turn increase user experience.

They are used to provide information with related pictures, videos to users.

Difference between Static WebPage and Dynamic WebPage

SL.NO Static Web Page

Dynamic Web Page

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|----|--|--|
| 1. | In static web pages, Pages will remain same until someone changes it manually. | In dynamic web pages, Content of pages are different for different visitors. |
| 2. | Static Web Pages are simple in terms of complexity. | Dynamic web pages are complicated. |
| 3. | In static web pages, Information are change rarely. | In dynamic web page, Information are change frequently. |
| 4. | Static Web Page takes less time for loading than dynamic web page. | Dynamic web page takes more time for loading. |

SL.NO Static Web Page

Dynamic Web Page

5. In Static Web Pages, database is not used.

In dynamic web pages, database is used.

6. Static web pages are written in languages such as: HTML, JavaScript, CSS, etc.

Dynamic web pages are written in languages such as: CGI, AJAX, ASP, ASP.NET, etc.

7. Static web pages does not contain any application program .

Dynamic web pages contains application program for different services.

8. Static web pages require less work and cost in designing them.

Dynamic web pages require comparatively more work and cost in designing them.