

INTRODUCTION TO INTERNET

- **Internet:** It is an inter-connection of large and small networks around the globe.
- **Applications of Internet:**
 - ✓ Exchanges of messages using e-mail (Electronic mail)
 - ✓ Transfer of files as well as software
 - ✓ Search on any topic on web (Browsing)
 - ✓ Communication with other networks
 - ✓ Search details of Government, individuals and organizations
 - ✓ Read news available from leading newsgroups
 - ✓ Send or receive animation and picture files from distant places
 - ✓ Reading different study materials
 - ✓ Shopping
 - ✓ Creation of website that provides details about your company's products and services.
- **How to get connected?** To get connected to Internet you need internet connection and a service provider known as Internet Service Provider (ISP).
- There are many ways to get connected to the Internet. They are as follows:
 - ✓ Dial-up Connection
 - ✓ Leased Lines
 - ✓ Broadband
 - ✓ Wi-Fi
- **Dial-up Connection:**
 - ✓ In dial-up connection, user gets a number for connection.
 - ✓ It is useful for single PC or for small group of computers.
- **Leased Lines:**
 - ✓ It is a dedicated network.
 - ✓ It provides high speed network.
- **Broadband:**
 - ✓ It provides a high bandwidth internet connection.
 - ✓ It is useful for large group of computers.
- **Wi-Fi:** The computer system should have Wi-Fi card to get this connection.
- **How to set up Internet?**
 - ✓ Connect to Modem
 - ✓ Connect Router to the Internet
 - ✓ Test Internet Connection
 - ✓ Set up Modem and Network
- **Types of Internet connection:**
 - ✓ Dial-up
 - ✓ ISDN (Integrated Services Digital Network)
 - ✓ Leased line connection (Direct Internet Access)
 - ✓ DSL (Digital Subscriber Line or Dedicated Service Line) /broadband

- **Dial-up Connection:**

- ✓ This is the most basic type of connection available from ISPs.
- ✓ In Dial-up connection, you have to dial a phone number.
- ✓ It provides low speed of internet connection.

- **ISDN (Integrated Services Digital Network):**

- ✓ ISDN is a telecommunication technology that enables the transmission of digital data over standard phone lines.
- ✓ It provides high speed of internet connection.

- **Leased Line Connection / Direct Internet Access:**

- ✓ It is an internet connection that is totally dedicated to a specific location or business.
- ✓ It is fully dedicated bandwidth that is not shared and the speed does not vary.

- **DSL (Digital Subscriber Line or Dedicated Service Line)/ Broadband Connection:**

- ✓ DSL transmits digital data over telephone lines.
- ✓ It is the most commonly used technology.
- ✓ The difference between DSL and dialup / ISDN is that a DSL Internet connection uses a high-speed dedicated circuit filtering out standard phone calls and Internet signals.

- **How Internet Works?**

- ✓ When data is transferred over the Internet, it is broken into a lot of same-sized pieces called 'packets'.

- ✓ A header is added to each packet that provides information where the data came from.
- ✓ Each packet is sent from one source computer to other destination computer.

- ✓ All the time packets may not take the same route to transfer data.
- ✓ At the destination, the packets are examined.
- ✓ If any packet missing or damaged, a message is sent to sender to resend the packet.
- ✓ Then the packets are reassembled into their original form.
- ✓ Each computer connected to the Internet has software called TCP/IP (Transmission Control Protocol/Internet Protocol), which is responsible for receiving, sending and checking packets. TCP/ IP are the 'glue' of the Internet.

- **World Wide Web:**

- ✓ It is commonly referred as WWW or W3.
- ✓ It is an interconnected system consists of electronic documents known as Web Page.
- ✓ The Web is not same as the Internet. It is one of the applications built on top of the Internet.

- **Web Server:**

- ✓ A Web Server is a computer that stores webpages.
- ✓ Web server is responsible to accept request(s) from the users and serves the response.
- ✓ Examples of Web server- IIS (Internet Information Server) and Apache.

- **Hyperlink:**

- ✓ A hyperlink is a word, phrase, or image that you can click on to jump to a new document or to new section within the current document.
- ✓ Hyperlinks are found in nearly all Web pages, allowing users to click their way from page to page.
- ✓ Hyperlinks usually appear as underlined text and in a different colour, but they may also appear as graphics, buttons etc.
- ✓ Hyperlinks may be used to link another place in the same page, or in different page. To play an audio or video file, to download a file, to set up a message to an e-mail address and to link to other Internet resources hyperlink can be used.

- **HTML (Hypertext Mark-up Language):**

- ✓ It is a language that consists of certain key words called 'Tags', used for writing the documents on the web.

- **Web Page:**

- ✓ A web page is an electronic document written in HTML (Hypertext Mark-up Language).

- ✓ Web pages can contain text, graphics, video, animation, sound.
- ✓ Web page can contain interactive feature like data entry forms.
- ✓ Each page has a unique address known as URL (Uniform Resource Locator) that identifies its location on the server.

- **Website:**

- ✓ A website (often shortened as site) is one or more web pages.
Ex: It may belong to a particular company, institute, Govt. organization or an individual.
- ✓ The first page is called the Home page, which acts like an index, indicating the content on site.

- **URL (Uniform Resource Locator):**

- ✓ Every page on the web has a unique address, known as uniform resource locator.
- ✓ A URL indicates where the web page is stored on the Internet.



CHECK YOURSELF

1. The first page of a website is known as _____.
2. _____ is a collection of web pages, images and videos hosted on a web server.
3. The _____ is a global network of networks.

4. The _____ is a communication protocol used on the web to transfer all kinds of information.
5. Which of the following is not a browser?
A. Mozilla Firefox
B. Internet Explorer
C. MS-Word
D. Google Chrome
6. Each web page has a unique address known as
A. URL
B. Website
C. HTTP
D. None of these
7. A program that is used to view websites is called a
A. Browser
B. Web viewer
C. Spreadsheet
D. Word processor
8. TCP/IP is a _____
A. Network Hardware
B. Network Software
C. Protocol
D. None of these
9. TCP/IP is mainly used for _____
A. File Transfer
B. Remote login
C. E-mail
D. All of these

10 The process of connecting to the internet account is

- A. Enter in
B. Sing out
C. Login
D. Logout

STRETCH YOURSELF

1. How does Internet work?
2. The Internet is an interconnection between several computers of same kind. (T/F)
3. What is a header?
4. All the computers have direct connections to the Internet (T/F)
5. Web pages on a site are linked together through hyperlinks (T/F)
6. Explain web server.

ANSWERS

Check Yourself:

1. Home Page
2. Website
3. Internet
4. TCP/IP
5. C
6. A
7. A
8. C
9. D
10. C