

## Chapter - 5 Internet and Web

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Que 1. Fill in the blanks:

- a) To transmit data for sharing on a network, it has to be divided into smaller chunks called \_\_\_\_\_.
- b) The set of rules that decide the functioning of a network is called \_\_\_\_\_.
- c) A LAN can be extended up to a distance of \_\_\_\_\_ km.
- d) The \_\_\_\_\_ connects a local area network to the internet.
- e) The \_\_\_\_\_ topology is of hierarchical nature.
- f) \_\_\_\_\_ is a standard naming convention used for accessing resources over the Internet.
- g) \_\_\_\_\_ is a collection of related web pages.
- h) A \_\_\_\_\_ is a computer that provides services to other programs or computers.

Ans.

- (a) Packet
- (b) Protocol
- (c) 1 km
- (d) Router
- (e) Tree or Hybrid
- (f) Uniform Resource Locator
- (g) Website
- (h) Server

Que 2. Expand the following:

- a) ARPANET
- b) ISP
- c) URL

Ans.

(a) ARPANET :- Advanced Research Projects Agency Network

(b) ISP :- Internet Service Provider

(c) URL :- Uniform Resource Locator

Que 3. Name the device for the following:

a) It stands for Modulator Demodulator

b) It regenerates the signals.

Ans.

(a) Modem

(b) Repeater

Que 4. Differentiate between:

a) MAN and WAN

b) Website and web page

c) Router and Gateway

d) Bus and Star topology

e) Static and Dynamic web pages

Ans.

(a) **Metropolitan Area Networks (MANs):** These are the networks that link computer facilities within a city.

**Wide Area Networks (WANs):** These are the networks spread over large distances, say across countries or even continents. It can even include a group of LANs connected together.

(b) A **website** is composed of a group of webpages linked together. A website refers to a central location on a web-server that contains more than one web page. A website may have just a homepage, or it may have many other internal webpages in addition to the home page.

A **web page** is a document that is accessed using http protocols and that resides on a web-site. A web page is always a part of a website.

(c) (i) A **Gateway** is a network device that regulates traffic between two dissimilar networks, while **routers** regulate traffic between similar networks.

(ii) A **router** connects a local network to the Internet and ensures that the traffic local to the LAN remains there only and the traffic not intended for your local network stays outside of it, on the Internet.

**(d) Bus Topology.** In this topology, all devices on network are connected to a single continuous cable called a bus. Transmission from any station travels the length of the bus in both directions and can be received by all other stations. The destination device, on identifying the address on data packet copies the data on its disk. When the data packet reaches at either end the transminator on that end absorbs the signal, removing it from the bus.

**Star Topology:** In this topology, each workstation is directly linked to central node. Devices can be easily plugged or unplugged to the central node, as need dictates. Any communication between the stations must pass through the central node.

**(e) Static Web page**

(i) The content on the server is served up to any visitor the same, every time.

(ii) Contains simple HTML code

(iii) Requires no additional special software

**Dynamic Web page**

(i) The content on the server is the same, but displays different data depending on information such as the time of day, the user who is logged in, the date, the search term it has been given to look for.

(ii) Along with HTML code, also contains dynamic code (in form of scripts).

(iii) Special software must be installed on the server to create a dynamic web page.

**Que 5. Define a network. What is the need of forming a network?**

**Ans.** A network is an interconnected collection of autonomous computers that can share and exchange information.

**Need of Forming a Network**

(a) Resource Sharing : Network allows to share the resources – data, files, software and hardware, irrespective of the physical location of the resources and user.

(b) Reliability : Multiple copies of files in a network decrease the risk of loss. So it make network more reliable.

(c) Reduced Codes : Resources are shared, it reduces the costs.

(d) Fast Communication : to exchange the information very fast speeds.

**Que 6. Give any two examples of networks.**

**Ans.** ARPANET, NSFNET

**Que 7. Give any three applications on the Internet.**

**Ans.** Email, Chat, Video Conferencing, World Wide Web (WWW), Voice Over Internet Protocol (VoIP)

**Que 8. Name any two mail service providers.**

**Ans.** Gmail, Yahoo Mail, Microsoft (outlook), Reddiffmail etc.

**Que 9. Explain VoIP.**

**Ans.** Voice over Internet Protocol or VoIP, allows us to have voice call (telephone service) over the Internet, i.e., the voice transmission over a computer network rather than through the regular telephone network. It is also known as Internet Telephony or Broadband Telephony.

VoIP works on the simple principle of converting the analogue voice signals into digital and then transmitting them over the broadband line.

**Advantages of VoIP :**

(a) Free or Very Economical

(b) Portable , Calls can be received using IP Phones.

**Disadvantage of VoIP :**

(a) Call quality depend on Internet speed.

**Que 10. What is DNS?**

**Ans.** DNS expands to Domain Name Server. DNS is a standard protocol that helps to find the IP address of a web site or web address.

For example; www.example.in into the 162.241.71.177

Command to find IP Address of any website : ping

www.example.in

**Que 11. Identify the type of topology from the following:**

a) Each node is connected with the help of a single cable.

b) Each node is connected with central switching through independent cables.

**Ans.** (a) Bus Topology (b) Star Topology

**Que 12.** Sahil, a Class X student, has just started understanding the basics of Internet and web technologies. He is a bit confused in between the terms “World Wide Web” and “Internet”. Help him in understanding both the terms with the help of suitable examples of each.

**Ans.** Internet is a collection of computers or networking devices connected together.

WWW is a collection of documents, linked via special links called hyperlinks. WWW forms a large part of Internet but is not the whole Internet.

**Que 13.** Murugan wants to send a report on his trip to the North East to his mentor. The report contains images and videos. How can he accomplish his task through the Internet?

**Ans.** Murugan can send these things via

(i) Email

(ii) Share them through cloud services like Google Drive / One Drive / Drive etc.

**Que 14.** Mampi is planning to open a company that deals with rural handicrafts. She wants to advertise about handicrafts on a social platform. Which Internet service she should use and why?

**Ans.** Mampi can create a website for the same.

A website is a set of related web pages located under a single domain name. Through various web pages of this website, Mampi can display the details of the handicrafts and the ways to obtain these and make payments.

**Que 15.** Ruhani wants to edit some privacy settings of her browser. How can she accomplish her task?

**Ans.** The privacy settings of a browser can be changed by opening the settings of a web browser and then opening Privacy and security subgroup of the settings.

**Que 16.** Shubham wants to play a video in his browser but he is not able to do so. A message on the screen instructs him to install the Adobe Flash Player plugin. Help him to add it in his browser.

**Ans.** Shubham can click on the installation link to go to the Adobe site and then download and install the required Flash payer plugin.

**Que 17.** When Joe typed a URL in the address bar of his browser, Error 404 was displayed? Why did this happen? What can be done to avoid it?

**Ans.** Error 404 happens when the requested webpage is not found.

Your can avoid It:

- (i) If it occurred because of a typing mistake then correct URL may be typed and
- (ii) if it occurred because the requested webpage no longer exists then unless the owner redirects the link or restores the deleted webpage, this cannot be resolved.



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