INTERNET TECHNOLOGY (DCA – 104)

1. ## INTRODUCTION TO INTERNET: (8 MARKS)

   1) **Website** is a collection of *html documents, graphic files, audio and video files.*

   2) The first network that planted the seeds of the Internet was **ARPANET**.

   3) Full form of ARPANET is **The Advanced Research Projects Agency Network (ARPANET)**.

   4) The communication protocol used by the Internet is **TCP/IP**.

   5) **TCP/IP** stands for **Transmission Control Protocol/Internet Protocol**, which is a set of networking protocols that allows two or more computers to communicate

   6) The **first page** that you normally view at a Website is its **Home Page**.

   7) A word that looks underlined on a Web page is usually a '**link**' to another Web page.

   8) The equipment needed to allow most home computers to connect to the Internet is called a **MODEM**.

   9) Voice mail, e-mail, online services, the Internet and the WWW are all examples of **Telecomputin**g.

   10) The **internet** is a single, but very large *network of networks of computers*.

   11) An **e-mail address** is **not case-sensitive**.

   12) A set of rules is known as **protocol**.

   13) **The URL specifies the Internet address** of a file stored on a host computer connected to the Internet.

   14) When the **cursor pointer changes to a han**d, you are over **a hyperlink**.

   15) **Tim Berner-Lee** is the "**Father of the WWW**".

   16) The term "**thumbnail**", refers to a small version of a large graphical image that you can usually click to display the full-sized image.

17) Guidelines that explain proper "behaviour" when posting and replying to articles on the Internet are called **Netiquette**.

18) **Internet** is network of networks.

19) **ISP** full form is Internet Service Provider.

20) **Netiquette** are the conventional rules for correct behaviour on the Internet.

21) **Demodulator** is an electronic device in a modem which decodes an incoming signal and extracts data.

22) **Ping command** is used to check the connectivity of a live network.

23) **Shareware** is software that is distributed for free on a trial basis.

24) **Compress** refers to shrink and store data in less space.

25) **Modem** is a connecting device between computers over a phone line.

26) The central structure that connects elements of a network is known as the **backbone**.

27) A **company** that offers Internet access is known as **Internet Service Provider (ISP).**

28) A **Packet Switching system** permits multiple pairs of computers to communicate across a shared network with minimal delay.

29) Menus embedded in text are called **hypertext**.

30) **Internet** is a global network connecting millions of computers which is used to exchange data, news and opinions.

31) The most common transfer protocol used on the Internet is **HTTP**.

32) A **Web Browser** is an application that displays Web pages.

33) Typing the **URL** correctly is essential to finding Web pages.

34) A **packet sniffer** is a program that captures data from information packets as they travel over the network.

35) A **ZIP** program is used to archive and compress files.

36) Connecting to the Internet requires four thin**gs: PC, Modem, Telephone line, and Internet software.**

37) **E-commerce or electronic commerce** means buying and selling items online.

38) **The Information Technology Act (ITA), 2000** consists of 94 sections.

39) **Intellectual Property Right** deals with trademark, patent and design rights.

40) **Codec** is Coder-decoder. A device which is used to encode or decode a digital data stream.

41) The full form of **MODEM** is – **Modulator / Demodulator**.

2. SERVICES ON INTERNET: (8 MARKS)

1) **E**-**mail** is Electronic Mail.

2) **E**-**mail** is a method of sending messages, voice, video and graphics over the internet.

3) An **email address** is a unique identifier for an email account.

4) Every email address has two main parts: **a username and domain name.**

5) In this jojocomputerinstitute@gmail.com, "**jojocomputerinstitute**" is the **username** and **gmail**.**com** is the **domain** name.

6) The **web** is the most popular Internet service next to e-mail.

7) Full form of WWW is **World Wide Web**.

8) The **WWW** is an Internet-based global information system.

9) In the year 1993, the first graphical interface software package called **Mosaic** was released.

10) A **web browser** is a program you use to view pages on Net and navigate the WWW.

11) **Browsers** are sometimes referred to as **Web clients**.

12) Currently, the most popular browsers for the WWW are; **Google Chrome, Mozilla Firefox, Internet Explorer, UC Browser, Opera Web Browser, Safari Web Browser etc.**

13) There are dozens of different ways of getting the information on the Internet, namely**, FTP, Gopher, Usenet news, WAIS databases, Telnet and e-mail.**

14) Full form of **FTP** is **File Transfer Protocol**

15) **WAIS** full form is **Wide Area Information Server.**

16) Full form of **HTTP** is **HyperText Transfer Protocol**.

17) A **web server** is a program that runs on a Website and is responsible for replying to Web browser requests for files.

18) A **web server** is **HyperText Transfer Protocol (HTTP) server**.

19) The **client server requests** and the **server returns** a *HyperText Markup Language (HTML) document*.

20) **Websites** need host computer and server software.

21) The **host computer** must have **a unique IP add**ress to send and receive information across the Internet.

22) Example of URL is; **https://www.amazon.in**, **https://www.google.com**

23) **URLs** are always *case-sensitive*.

24) Every page on the Web has a unique address called a **URL**. *Eg., https://youtu.be/_w4epP1zOlw*

25) **URL** full form is **Uniform Resource Locator**.

26) The full form of **Telnet** is **Telecommunication Network**.

27) The **Telnet service** allows an Internet user to log in to another computer somewhere on the Internet. This action is also called '**remote login**'.

28) You can access many host on the Internet by using **Telnet**.

29) The **FTP service** allows an Internet user to move a file from one computer to another on the Internet.

30) **Usenet** stands for **User Network**.

31) **Usenet** is an international, non-commercial network, linking thousands of UNIX-based sites.

32) A **search engine** is a software that searches through a database of web pages for specific information.

33) Some popular **search engines** are; Google, Yahoo, Bing etc.

34) The **telnet protocol** assumes that each end of the connection – the client and the server – is **Network Virtual Terminal** (**NVT**)

35) **Telnet** works with the **Terminal Emulation Protocol**.

36) The act of exploring the Web is known as **surfing**.

37) **Shift + Tab** selects the **previous tab**.

38) Collection of Usenet is **Usenet**.

39) **Web forms** give you the ability to upload or post information on to a website.

40) **HTTP** is the most common protocol to access URL address on the Internet.

41) **Domain Name System (DNS)** is an acronym for the address of a document found on the Internet.

42) The **URL describes** the hierarchical directory or folder structure on the host computer that stores the file.

3. ELECTRONIC MAIL: (8 MARKS)

1) **SMTP** is a simple TCP/IP protocol.

2) A simple protocol used for fetching e-mail from a mailbox is **POP3**.

3) **POP3** full form is **Post Office Protocol version 3**.

4) E-MAIL address is made up of **two parts**.

5) The two parts of e-mail address are separated by the @ symbol.

6) **UUCP** is a Unix-to-Unix File Copy Protocol.

7) The program supplied by VSNL (Videsh Sanchar Nigam Limited) when you ask for Internet connection for e-mail is **Pine**.

8) **SMTP** stands for **Simple Mail Transfer Protocol**.

9) The e-mail component of *Internet Explorer* is called **Outlook Express**.

10) Messenger Mailbox is present in **Netscape Communicator**.

11) A convenient place to store contact information for quick retrieval is **Address book**.

12) **Bounced mail** returns to **sender**.

13) **Mail bombing** means flooding an e-mail account/server.

14) **IMAP** can access e-mail without downloading.

15) Unsolicited commercial e-mail is called **Spam**.

16) The process of directing a message to the recipient's host is called **Routing**.

17) To read incoming mail, choose **Inbox**.

18) **BCC** is called Blind Carbon Copy.

19) Messenger allows you to store e-mail addresses in its **address book**.

20) If any person writes his signature in a message, then the signature of that person is stored in *a file in a binary form* called **Signature file**.

21) **Digital signature** is a mechanism for authentication and data encryption.

22) **MIME** stands for **Multipurpose Internet Mail Extensions.**

23) **MIME** is a widely used Internet standard for encoding binary files to send them as e-mail attachments over the Internet.

24) **IMAP** stands for **Interactive Mail Access Protocol**.

25) **SMTP** is a simple ASCII protocol.

26) **ASCII** full form is **American Standard Code for Information Interchange**.

4. CURRENT TRENDS ON INTERNET:(8 MARKS)

1) **Java** is a computer language developed by Sun Microsystems in 1995.

2) **Java** is a high level language, objected oriented language.

3) **Java** is now owned by Oracle Company.

4) When Java programs are run inside a browser, they are called **applets**.

5) **ActiveX** is a software framework created by Microsoft.

6) The three most important programming tools associated with Web technology are **Java, JavaScript and ActiveX**.

7) **JavaScript** can be combined directly with HTML.

8) **JavaScript** is a scripting language.

9) **Digital subscriber line** (DSL; originally **Digital Subscriber Loop**) is a family of technologies that are used to transmit digital data over telephone lines.

10) **JavaScript** was originally developed by Netscape Navigator.

11) **MBone** (Multicast Backbone) is a special internet high-speed backbone capable of sending vast amount of information.

12) **Streaming Video** lets the receiving computer start playing the video while the file is being transmitted.

13) **E-commerce** is maintaining business relationships and selling information using Internet.

14) **In Video conference,** you can talk live with someone and see them live on your computer screen.

15) **Amazon.com** comes under the **Business to Consumer** (**B2C**) model.

5. **INTERNET SECURITY MANAGEMENT CONCEPTS: (8 MARKS)**

1) **SSL (Secure Socket Layer**) allows secure connection.

2) **Networks** are vulnerable to computer crime like **hacking, viruses and software piracy**.

3) **A proxy server** is used as the computer with external access.

4) **The proxy service** hides the internal host and service.

5) **Password** is the method of authentication.

6) **Confidentiality, integrity and availability** are basic requirements of Internet Security.

7) **In copyright,** only expression is protected, not facts or ideas.

8) **Firewall** is hardware or software designed to protect against network hackers.

9) **Firewalls** cannot protect computer against viruses.

10) The process of translating information from its original form into an encoded incomprehensible form is called **encryption**.

11) **A good firewall** system should be **flexible**.

12) **Stageful Inspection** is one type of Firewall.

13) **Callback** is a security feature.

14) Collection and analysis of data is called **Auditing**.

15) **Hacker** is a computer enthusiast or expert who gains unauthorized access to computer systems for the purpose of stealing corrupting data.

16) **Firewall** stops unwanted traffic from entering the network.

17) **Cryptography** is a tool that can be used to keep information confidential and to ensure its integrity and authenticity.

18) **Cryptography** involves two processes, namely, encryption and decryption.

19) **Packet Filters** allows network administrators to limit a user's access to specific services on the network.

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Points to remember:

1. **Internet**: The network of networks wherein billions of computers globally are connected to one another.

2. **Protocol**: A set of rules that are used by networks and computers to communicate with each other in a logical fashion.

3. **IP Address**: Every computer or a device connected on the Internet has address called Internet Address or the IP Address. It is used to exchange information and emails betweens.

4. **Modem**: Modulator – Demodulator.

5. **Routers**: Devices used to direct Internet traffic by determining th optimum path that can be taken by the data to reach from the host computer to the destination computer.

6. **Packets**: When a computer sends data over the Internet, it is broken up into pieces called packets by the TCP protocol.

7. **Broadband**: A connection that provides faster internet access, enabling users to view web content faster and download or upload files more quickly.

8. **Web browser:** Software that displays information on your computer by interpreting the HyperText Markup Language. Eg., Google Chrome, Internet Explorer, UC browser, Mozilla Firefox, etc.

9. **Web server:** A powerful computer on the Internet that stores web pages and delivers web pages to the users.

10. **Web page:** A digital page incorporating text and any or of the multimedia elements like graphics, sound or animation.

11. **Website:** A combination of multiple web pages.

12. **Web Address:** The Address of a website over the Internet. Eg., *http://mail.google.com/mail/*

13. **Home page:** The top page of a website.

14. **The World Wide Web Consortium (W3C)** develops standards for the evolution of the fastest growing part of the Internet.

15. **Internet Service Providers (ISPs)** provide their consumers with Internet access by connecting to the high-speed backbones.

16. **LAN** full form is Local Area Network.

17. **WAN** full form is Wide Area Network.

18. **DHTML** is an advanced version of HTML. It can perform animations and is more interactive and flexible than HTML.

19. **WAIS** is a search tool over the Internet. It has the capability of searching multiple databases at a time.

20. Pages on the Web are built using a markup languange called **HyperText Markup Language (HTML)**.

21. In 1960s, **Defence Advanced Research Projects Agency (DRPA**) of USA researched on connecting computers. The first network was called **ARPANET** and it initially connected academic and military research centres.

22. **The Advanced Research Projects Agency Network (ARPANET)** was an early packet-switching network and the first network to implement the TCP/IP protocol suite.

23. **4G**, short for fourth generation, is the fourth generation of wireless mobile telecommunications technology.

24. The web address is expressed as four numbers separated by dots such as **192.168.0.168**. It is also called as **Internet Protocol (IP)** address.

25. Internet speed is measured in **megabits (Mb) per sec**ond. It is often abbreviated as "**Mbps**."

26. A bit is a **binary digit**, or a small unit of computerized data.

27. **FTP** – **File Transfer Protocol**; It is used to download and upload files over the Internet.

28. **Telnet** – A protocol that helps to establish connection between two computers over the Internet.

29. **Gopher** – A protocol helps in distributing, searching, and retrieving documents over the Internet.

30. **Google, Bing, Ask, IE, UC Browser, Lycos, Excite, WebCrawler and khoj** are some of the popular search engines over Internet.

31. **Chat** – Online textual communication between two persons.

32. **Channel** – Topic under chat.

33. **Chat rooms** – Websites offering online chat.

34. **Instant messaging –** Private one-to-one communication between two persons.

35. **E-learning –** It is a wide set of applications and processes which use all available electronic media to deliver education and training.

36. **E-banking –** Facility to do banking transaction on the computer.

37. **E-shopping** – Also known as online shopping; system of consumers buying goods and services from a seller interactively over the Internet.

38. **E-reservation –** or **Computer Reservations System (CRS)** is a computerised system used to conduct transactions like booking or cancellation of air, rail or bus tickets.

39. **Social media** – A wide range of Internet-based and mobile services that permit users to participate in online exchanges post content or join online communities.

40. **Blog** – A type of website, maintained by an individual who keeps updating it with his/her views and comments.

41. **Blogger** – A person who posts entries in a blog.

42. **Blog post** – An individual article on a blog.

43. **Newsgroup** – A forum in which people from all over the world participate in discussions.

44. **Plug-in**: A piece of software used to display the files that a web browser is unable to display.

45. **Tabbed browsing**: Feature that allows several web pages to be opened simultaneously.

46. **InPrivate browsing**: Feature that lets users access the Internet without creating history record of sites visited and saving cookies.

47. **Pop-up**: A small browser window that appears on the top of the existing browser window.

48. **HTML** was created by Tim Berners-Lee in 1989.

49. **XML** stands for Extensible Markup Language. XML is not replacement of HTML.

50. **No one actually owns the Internet**.

51. List of internet service providers in India are; **Jio, Airtel, BSNL, Tata Teleservices, Vodafone Idea, ACT Fibernet, MTNL, Hathway, You broadband, GTPL Broadband Pvt. Ltd.**

Book references:

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2. DCA reference book**: ComputerAhead CBSE Class X TextBook** – *By Rajiv Mathur.*

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