

TOPIC 7: THE INTERNET & WORLD WIDE WEB

Define the term “The Internet”?

The internet is a global connection of computer networks. The internet links together millions of computers, to exchange and share information all over the world.

What are the requirements needed one to get connected to the Internet

- *Network Interface Card*
- *Web browsers*
- *Computer*
- *Internet Service Providers*
- *Modem/Dial-up modem.*

Explain the advantages and disadvantages of getting connected to the internet.

- *Access a wealth of information, such as news, weather reports, and airline schedules.*
- *Shop for goods and services through E – commerce*
- *Use online banking services and manage investments.*
- *Do research and take online training courses.*
- *To download files, software etc.*
- *For Advertisement. People use internet to publish information about themselves or their work*
- *Make cheap internet calls*
- *Send and receive email to and from other connected users.*
- *Communicate with others around the world through chat rooms, videoconferencing e.t.c*
- *Access sources of entertainment and leisure, such as online games, magazines, and vacation planning guides, listen to music, and watch movies.*
- *Has storage where you can store information safely and can access it anywhere.*
- *It is accessible 24/7 (always on)*
- *Search Engines like Yahoo, Google can help you get what you want – compared to looking for information in a Library.*

Disadvantages of using the Internet

- *Computer viruses these can be downloaded and spread across machines and have destructive effects.*
- *Internet provides unsuitable material such as Pornography, the biggest threat related to healthy mental life.*
- *Theft of Personal information*
If you use the Internet, you may be facing grave danger as your personal information such as name, address, credit card number etc. can be accessed by hackers or thieves.
- *Spamming: Spamming refers to sending unwanted e-mails in bulk, which provide no purpose and needlessly obstruct the entire system.*
- *Some people are getting addicted to the internet and thus causing problems with their interactions of friends and loved ones.*
- *Some of the sites on the internet require passwords to have access to information that you want.*
- *The initial cost of connecting to the internet is high. e.g. buying computers.*
- *Many people are computer illiterate and so cannot use internet.*

- *There is a lot of wrong information on the internet. Anyone can post anything, and much of it is deceit/garbage*

Describe the following services offered at the internet

The World Wide Web: *also called the Web consists of a worldwide collection of electronic documents. Each of these documents on the Web is called a Web page. A Web page can contain text, graphics, animations, audio, and video (i.e., multimedia elements), as well as built-in connections, called hyperlinks, to other documents.*

E-mail: *is the transmission of messages via a computer network such as a local area network or the Internet.*

FTP (File Transfer Protocol): *is an Internet standard that allows users to upload and download files with other computers.*

Newsgroups: *also called a discussion group, is an online area where users conduct written discussions about a particular subject.*

Message boards: *or discussion board is a Web-based type of discussion group that does not require a newsreader program.*

Mailing lists: *is a group of e-mail names and address given a single name. When a message is sent to a mailing list, every person on the list will receive a copy of the message.*

Chat rooms: *is a location on an Internet server that permits users to chat with each other by typing lines of text on the computer.*

Instant messaging: *is a real-time communications service that notifies a user when one or more people are online and then allows the user to exchange messages or files with them.*

Internet telephony: *sometimes called Voice over IP (VoIP), is a Web-based telephone service that allows a user to talk to others for just the cost of the Internet connection.*

Videoconferencing: *is a meeting between two or more geographically separated people who use a network or the Internet to transmit audio and video data. A videoconference conducted over the Internet, using Web browsers and Web servers to deliver the service, is called a Web conference.*

Give the factors that lead to a slow internet.

- *Quality of the Internet Service Provider*
- *Age of the computer used*
- *Type of the Communication medium used*
- *Distance of broadcasting service*
- *Type of web browsers*
- *Weather*

Define the term Internet Service Provider (ISP)

This is a company that supplies internet connections and also includes offering services related to the internet.

Give the examples of Internet Service Providers in Uganda

- *Airtel Uganda*
- *Mobile Telecommunications Network*
- *Orange Uganda*
- *Vodafone*
- *Iway Broadband*
- *Inconnect*
- *Uganda Telecom*
- *Orange Telecom.*

What is meant by the term WWW?

The World Wide Web (WWW), also called the Web, consists of a worldwide collection of electronic documents.

Distinguish between a web page and a website?

*A **web page** is an electronic document on a website. A Web page can contain text, graphics, animations, audio, and video (i.e., multimedia elements), as well as built-in connections, called hyperlinks, to other documents*

***Website** is a collection of related Web pages.*

Define the term a web browser?

A Web browser is a software program used to access and view Web pages

List the examples of Web browsers that you know.

- Internet Explorer
- Mozilla Firefox
- Opera
- Safari
- Google Chrome
- Konqueror
- Netscape
- QNX Voyager
- Lunascape
- Arora
- Lynx
- Dillo
- Kazekhase
- NetPositive
- K-Meleon

What is the difference between DNS and DNS server?

The domain name system (DNS) is the system on the Internet that stores the domain names and their corresponding IP address.

The DNS server translates the domain name into its associated IP address, so that data can route to the correct computer.

What is HTML? How does it related to the Internet technology?

HTML stands for Hypertext Markup Language, which is a set of special codes that format a file for use as a Web page on the Internet. The codes, also known as tags, specify how text and other elements display in a browser and where the links lead.

What is URL? How does it related to the Internet technology?

The Uniform Resource Locator (URL) is the unique address of a Web page. It tells the browser where to locate the Web page on the Internet

How is HTTP different from FTP?

HTTP stands for hypertext transfer protocol, which is the standard that enables pages to transfer on the Web.

FTP (File Transfer Protocol) is an Internet standard that allows users to upload and download files with other computers.

For the URL <http://www.wong-sir.com/it/notes.html>,

- a) What does http represent?
- b) What is the domain name?
- c) What is the top-level domain (TLD)?
- d) What is the path?

- a) **HTTP** stands for *hypertext transfer protocol*, which is the standard that enables pages to transfer on the Web.
- b) **www.wong-sir.com** is the domain name.
- c) **.com** is the top-level domain.
- d) **it/notes.html** is the path.

Describe briefly the following terms:

- a) **Web page**
- b) **Web site**
- c) **Home page**
- d) **Hyperlink**

- a) A **Web page** is an electronic document on the Web.
- b) A **Web site** is a collection of Web pages.
- c) **The home page** is the index page of a Web site. It is also the default Webpage loaded when the Web site is entered.
- d) A **hyperlink**, also called a link, is a built-in connection to another related Web page or part of a Web page.

What is a search engine? Describe briefly how to operate a search engine.

A search engine is a software program that can be used to locate Web sites, Web pages, or files on the Internet.

To operate a search engine, the user simply enters a word or phrase, called the keywords or search text, to the search engine, and the search engine then displays a list of all the Web sites or Web pages that match the keywords or search text entered.

State two advantages of using e-commerce in business.

- *Transactions can occur immediately and globally, thus save time for participants on both ends.*
- *Transactions can occur 24 hours per day.*
- *Businesses have access to millions of people with Internet connections.*
- *Businesses have the ability to gather customer information, analyze it, and react if appropriate.*
- *Information can be changed and be available quickly.*
- *Customers can compare prices easily.*
- *Feedback can be immediate.*
- *Manufacturers can buy and sell directly, avoiding the cost of the middleman.*
- *Distribution costs for information is reduced or eliminated.*

State two advantages of email over ordinary post.

- *Emails are delivered extremely fast when compared to traditional post.*
- *Emails can be sent 24 hours a day, 365 days a year.*
- *Webmail means emails can be sent and received from any computer, anywhere in the world, that has an Internet connection.*
- *Cheap-when using broadband, each email sent is effectively free. Dial-up users are charged at local call rates but it only takes a few seconds (for conventional email, eg text only) to send an email.*
- *Emails can be sent to one person or several people.*
- *Computer files can be attached to an email.*
- *Records and copies are kept automatically.*

What is a Web forum?

Is a site where people discuss various topics.

Mention two services provided by the internet.

- *The World Wide Web*
- *E-mail*
- *FTP (File Transfer Protocol)*
- *Newsgroups*
- *Messageboards*
- *Mailinglists*
- *Chatrooms*
- *Instant messaging*
- *Internet telephony*
- *Videoconferencing*

State the factors that lead to a slow internet download speed.

- *Quality of ISP.*
- *Age of computer set.*
- *Weather.*
- *Age and type of the network infrastructure used.*
- *Type of browser being used.*
- *Many pictures, animations, sounds and graphics on the page.*
- *Distance from the broadcasting device.*
- *Length of cable being used.*

What is a Web mail?

A site that provides a web mail service.

Give the difference between a webpage and a website.

A webpage is any page on the website While a Website is a collection of related web pages

Briefly, explain the following website types:

(i). Portal.

This is site that provides starting point or gate way to other resources on the Internet.

(ii). Blog.

This is a site generally used to post online diaries which may include discussion forums. Examples include; Blogger and Xanga

(iii). Wiki.

Is a website which allows collaborative modification of its content and structure directly from the web browser.

(iv). Rating site.

A rating site (less commonly, a rate-me site) is a website designed for users to vote on or rate people, content, or other things.

Give two crimes committed through use of e-mails.

- *Fraud.*
- *Malice.*
- *Sabotage.*
- *Spamming.*
- *Identity theft.*
- *Hacking into e-mail accounts.*

- *Eavesdropping*
- *Cracking.*
- *Software piracy.*
- *Intellectual property infringement.*

What are the advantages of e-mail over ordinary post?

- *Unlikely to be lost*
- *Faster to arrive*
- *Allows sending messages to several people at a time*
- *Cheaper in terms of costs involved*
- *Messages can be sent at any time anywhere*
- *Allows sending multimedia format documents*
- *Less prone to illegal access*
- *Several documents can be sent at once*

Mention the advantages of ordinary post over electronic mail

- *It is good /convenient for sending physical items*
- *Good for sending legally binding documents*
- *Convenient for sending bulky/large documents*
- *It is a cheaper method of sending documents*
- *It offers a safer delivery of sent documents*
- *Documents can be tracked while in transit*
- *There is a possibility of checking the documents before sending during transit or at the destination for security purposes*
- *It is a convenient for all categories of people*
- *It provide employment opportunities to people involved*
- *It offers infrastructure development in terms of paying taxes*

a) A hyper link is a built in connection to another related page or part of a webpage which can be a text or image while

b) A home page is the starting/index/first page of a website which can act as a list/table of contents or an index page to the website

16 (b)

Netiquette guidelines while using internet

- Keep message brief and use proper grammar and spellings
- Be careful when using sarcasm and humor
- Never read someone's private mail
- Minimize use of uppercase in text when sending messages
- Post only acceptable information that has no harm to the public
- Avoid impersonation

- Adhere to the same standards of behavior online that you follow in real life
 - Know where you are in cyber space
 - Respect other people's time and bandwidth
 - Make yourself look good online
 - Help keep flame wars under control
 - Respect other people's privacy
 - Don't abuse your power
 - Be forgiving of other people's mistakes
 - Logout or log off your account after use
 - Forward e-mail messages you receive only with permission of the sender.
 - Remember you are not anonymous. What you write in an e-mail and web site can be traced back to you.
 - Obey copyright laws. Don't use others' images, content, etc. without permission.
 - Use distribution lists appropriately and with permission.
 - Do not send SPAM i.e. posting or e-mailing unsolicited e-mail, often advertising messages, to a wide audience
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- Facilitates internal emails
 - Provides access to company contacts information, procedure manual and other frequently updated documents
 - Used for posting and updating employee forms
 - Posting internal job listings
 - Provides electronic catalogs for ordering supplies
 - Facilitates collaborative computing
 - Scheduling meeting and appointments
 - Posting financial statements and other types of corporate information
 - Maintains shared calendars, projects timelines and other project documents
 - Provides access to company databases and other systems
 - For monitoring internal security

1. (a). Name two pieces of hardware needed to enable video-conferencing to take place using a standard computer system. (02 marks)

- ✓ *microphone*
- ✓ *speaker*
- ✓ *web cam*

(b). State one piece of specialist software needed to carry out Video – conferencing.

(01 mark)

- ✓ Skype
- ✓ Lenovo you cam.

(c). State two advantages of using video - conferencing over instant messaging.

(02 marks)

- ✓ *Communication involves users seeing their pictures on either machine.*
- ✓ *It allows for voice call communications.*
- ✓ *Recordings can be used for future reference.*