

## 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* **While**

**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*
- *Message boards*
- *Mailing lists*
- *Chat rooms*
- *Instant messaging*
- *Internet telephony*
- *Videoconferencing*

**State the factors that leads 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
- 
- 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.*

