B.E.
Fourth Semester Examination, Dec-2006
INTERNET FUNDAMENTAS

Note : Attempt any five questions.

Q. 1. (a) Write down the advantages of the following in e-mail :

(i) address book

(ii) signature

(iii) attachment

Ans. (i) Address Book : To deliver mail, a mail handling system must use an addressing system with unique addresses. With the help of address book one need not to remember the email address of particular person. Just clicking in address book email id appears in "To" text box.

(ii) Signature : With help of signature one need not to specify the footer. One can add the message he wants to add in signature and by invoking the option, no need to add signature again and again, automatically when we will send signatures get attached to the email.

(iii) Attachment : With help of attachment one can send any text document, picture, video etc. to the other person using attachment. The receiver receives the same message that sender has sent with same format without any distortion in the message.

Q. 1. (b) Write an explanatory note on e-mail management.

Ans. In email management one can either send mail, receive mail, addresses, delete the mail, block particular email address, send "CC" to a number of person, can send "BCC" to a number of person and many other features.

1. Sending Mail : To send mail, the user creates mail that looks similar to postal mail. It has an envelope and a message.

(i) Envelope : Contains senders address, receivers address and other information.

(ii) Message : Contains headers and body.

2. Receiving Mail : The email system periodically checks mail boxes. If user has mail, it informs the user with a notice. If the user is ready to read the mail, a list is displayed in which each line contains a summary of information about a particular message in mail box.

3. Replying : User can send reply to the mail. Normally the email system provide the facility to reply to the original sender or to reply all the recipients of message.

4. Forward Messages : One can either forward message to one person or more than one person.
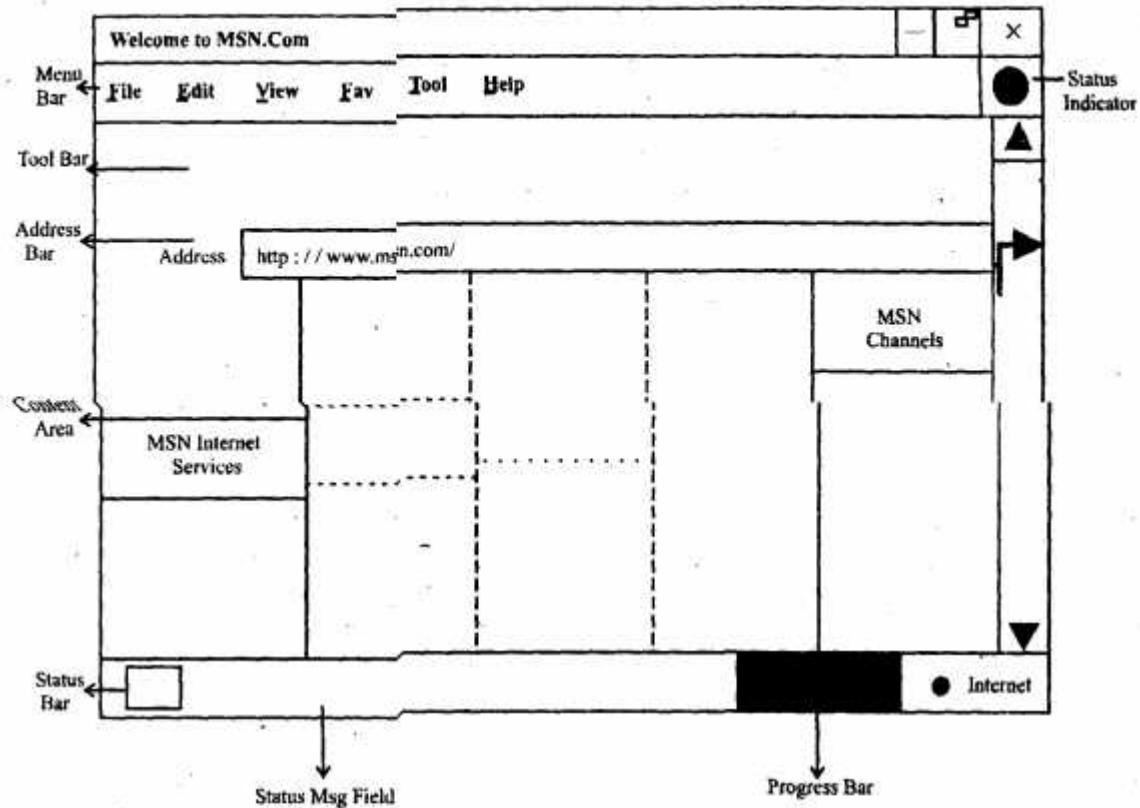
When you first launch your web browser usually by double clicking on the icon on your desktop, a predefined, web pages appears. This page is referred to as your home page or start page. With navigator for instance, you may be taken to Net scape's Net centre or to a page selected by your Internet service products.

Q.2.(b) What is WWW? How are the addresses defined on Internet?

Ans. WWW is World-Wide-Web which has made live of people easier. It has entirely changed the life structure of people also it has changed the world. WWW uses HTTP a file transfer protocol. This protocol transfers data is form of plain text, hypertext, audio, video and so on. The addresses on internet are defined or accessed through URL (Uniform Resource Locator). It is a standard for specifying any kind of information on internet.

It defines four things :

– Method

– Host computer

– Port

– Path

Method : It is the protocol used to retrieve the document. This method is distinct from the request type method.

Host : It is the computer where information is located although the name of computer can be an alias.

Path : It is name of file where information is located. .

Q. 4. (a) Discuss structure of an HTML document.

Ans. HTML (Hyper Text Markup Language) is a language for creating web pages. The term markup language comes from back publishing industry.

The HTML page contains two parts :

– Head

– Body

(i) **Head :** The head is the first part of web page. The head contains the title of page and other parameters that the browser will use.

(ii) **Body :** The actual contents of a page are in the body, which includes the text and tags. Where as the text is the actual information contained in a page the tags define the appearance of the document.

(iii) **Tags :** The browser makes a decision about the text based on the tags, which are marks that are embedded into the text. A tag is enclosed in two signs (< and >) and usually comes in pairs. The beginning tags starts with the name of tag and the ending tag starts with a slash followed by name of tag.

Q. 4. (b) What is XML? Where is it used?

Ans. XML : Extensible Markup Language. XML, which stands for Extensible Markup Language is means by which data can be stored in an easy to read textual implementation. XML uses a tag-based implementation similar to HTML however unlike HTML, there are no predefined XML tags. The creator of an XML file must define his/her own tags, deciding how these tags describe the data type represent. XML uses markup tags as well, but unlike HTML, XML tags describe the content rather than the presentation of that context. XML possess or XML processors are the applications used for reading XML document.

Q. 5. (a) State significance of a web server. What is PWS?

Ans. A server is a member of a class of programs in a modern software architecture paradigm called client/server software architecture, in which all applications have two components.

– Client component

– Server.

It has following characteristics :

– Server is often centralized.

– Server is passive, it does little or nothing until it receives an explicit request from client to do something.

– It runs continuously waiting for request.

– Usually runs in back ground

– Handles multiple tasks.

PWS (Personal Web Server) : It is microsoft's version of web server program for individual PC users who want to share web pages and other files from their hard drive.

Q. 5. (b) Write a detailed note on Apache server.

Ans. Apache Server : It is a public domain open source web sever developed by a loosely-knif group of programmers.

The first version of apache, based on the NCSA http web sever was developed in 1995.

Core development of the apache web sever is performed by a group of about 20 voluteer programmers, called the Apache Group. However because the source code is freely available, anyone can adopt the sever for specific needs and there is a large public library of Apache add-ons. In many respects development of apache is similar to development of LINUX O.S.

The original version of Apache was written for UNIX, also is OS/2, & windows

Q. 6. (a) What is software complexity? How can it be measured?

Ans. Software Complexity & its Measured : Software complexity is basically depends upon is main factor. It means how feasible a software for users.

1. Cost (Price/Performance ratio.

2. Familiar/easy to use as well as easy to edit/modify.

3. Time less/It take less time to complete or complete within the duration of deadline.

Main measures are how economical means low cost, or a software within our budget. Software shared be economical, having good price/performance ratio and more speed, easy to install, take less time and it is familiar means easy to use by the persons and the manual also easily updated.

Q. 6. (b) What are various encryption standards?

Ans. Encryption is basically converting the plain text into ciphertext. And for encrypting the plain text into cipher text we are using.

DES : Data Encryption Standard

AES : Advanced Encryption Standard.

DES : It uses only a 56 bit key, it was only a matter of time before computer speed made DES absolete. The life of DES was extended by the use of triple DES which involves repeating the basic DES algorithm 3 times, using either two or three unique keys, for a key size of 112 or 168 bits. The principle drawback of 3DES is that the algorithm is relatively swigging in software.

AES : NIST specified that AES must be a symmetric block cipher with a block length of 129 bits and support for key length of 128, 192 and 256 bits its evaluation criteria include security, computational efficiency, memory requirement, hardware and software suitability and flexibility.

Q. 7. Explain the following terms :

(a) FTP

(b) TELNET

(c) ARCHIE

(d) DNS

(e) Cookies.

Ans. (a) FTP : File Transfer Protocol is basically used to exchange files between computers. One of the

most popular network services is electronic mail. Electronic mail is used for sending a single message that includes text, voice, video, or graphics to one or more recipient.

(b) TELNET : It is an Internet program for connecting to a remote post or sever. The Telnet interface is text-based and a user usually has to enter his login Name & password before gaining access to the system. We can check our e-mails, downloading a program, chatting with other Telnet users.

(c) ARCHIE : In previous years, when the yahoo is not available, people use to index the files available with hence and send the location of those files to a common sever that would index them. This was commonly done overnight, so next files indexed done on next moving.

This index was called ARCHIE ARchie, make easy to locate document and progress using yahoo and other search engines.

(d) DNS (Domain Name Space) : To have hierarchical name space a DNS was designed. In this design, the names are defined in an inverted tree structure with the root at the top. The tree can have only 128 levels : Level 0 to level 127 whereas the root gives the whole tree together each level of the tree is defines a hierarchical level.
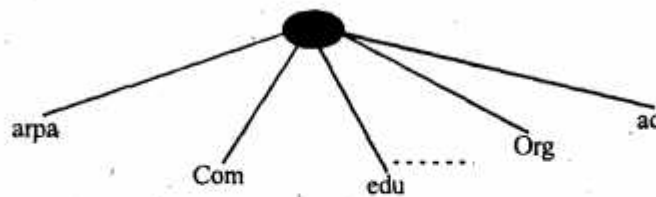
(e) Cookies : It refers to a piece of information sent by a web sever to web browser to that the browser s/w saves it and sends back to the sever whenever the browse make addition request from the severs.

Q. 8. Write short notes on the following :

(a) Javascript

(b) Firewalls.

Ans. (a) Javascript : It is a scripting language introduced by Netscape used for creating dynamic web pages. Javascript was developed by Brandon rich of Netscape and it use the same syntax as Java, they were (Javascript & Java) developed Independently of each other and Javascript relies on the environment it's operating in for the user interface, such as a web document's from element. Javascript support a run-time system based on a small No. of data type representing numeric, boolean and string valves. In Javascript we do not declare all variable.

(b) Firewalls : It is any device used to prevent outsidess from gaining access to your N/w. This device is usually a combination of s/w and hardware. A firewall is located at a N/w gateway sever that protects the resources of a private N/w form users from other N/ws. The term also implies the security policy that is used with the programs.

An enterprise with an internet that allows its workers access to the wider Internet installs a firewall to prevent outsidess from accessing its own private data resources & for controlling what outside resources its own users have access to.