

### M3: INTERNET AND WEB PAGE DESIGN

#### NOTE:

1. There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.
2. **PART ONE** is to be answered in the **TEAR-OFF ANSWER SHEET** only, attached to the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.
3. Maximum time allotted for **PART ONE** is **ONE HOUR**. Answer book for **PART TWO** will be supplied at the table when the answer sheet for **PART ONE** is returned. However, candidates, who complete **PART ONE** earlier than one hour, can collect the answer book for **PART TWO** immediately after handing over the answer sheet for **PART ONE**.

**TOTAL TIME: 3 HOURS**

**TOTAL MARKS: 100**  
**(PART ONE – 40; PART TWO – 60)**

#### **PART ONE** **(Answer all the questions)**

1. **Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)**
  - 1.1 Router is
    - A) A Hardware or a software on a computer network that examines the address at where the data is being sent and decides by which path it should be transmitted to its destination.
    - B) A tool for sifting and locating specified information stored anywhere on the Internet.
    - C) A system designed to secure a network from unauthorized access or threatening action from an external source, such as the Internet.
    - D) None of the above
  - 1.2 Output that is made up of pictures, sound and video is best described as
    - A) Graphics
    - B) Multimedia
    - C) Hard copy
    - D) Multi aspect
  - 1.3 Web sites contain many pages that can be navigated using
    - A) bars
    - B) threads
    - C) hyper links
    - D) strings
  - 1.4 A network that can function without a server is a
    - A) ring network
    - B) star network
    - C) bus network
    - D) all of the above

- 1.5 What is the World Wide Web?  
A) a computer game  
B) a software program  
C) the part of the Internet that enables information-sharing via interconnected pages  
D) another name for the Internet
- 1.6 On what type of switching does Internet work?  
A) Line  
B) packet  
C) circuit  
D) bits
- 1.7 Software that prevents external access to a system is termed  
A) firewall  
B) gateway  
C) router  
D) virus checker
- 1.8 Protocol is  
A) software that facilitates connection to the internet  
B) a list of rules for transferring data over a network  
C) software that allows file copying  
D) a gateway calling program for internet bridging.
- 1.9 Which one of the following is a valid email address?  
A) Enquiries.guilds.co.@.uk  
B) sales@enquiries.guilds.co.uk  
C) @sales.enquiries@guilds.co.uk  
D) sales.enquiries.guilds.co.uk
- 1.10 Shareware is software  
A) you can buy and share with anyone  
B) that you can use totally free of charge continually  
C) you can obtain from anywhere but must purchase after a set condition  
D) that can only be shared over an in-house network.

**2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the “tear-off” sheet attached to the question paper, following instructions therein. (1 x 10)**

- 2.1 Telnet is the basic Internet service that was designed to transfer files from one computer system to another.
- 2.2 An URL is a location address on the Internet.
- 2.3 Usenet is a set of acceptable behaviors that users should follow while on the Internet.
- 2.4 E-mail is limited to text-based messages.
- 2.5 Gopher organizes information on the Internet using a system of menus.
- 2.6 Hypertext is a text with many images and sounds.
- 2.7 No single organization controls additions, deletions and changes to the Internet.
- 2.8 Download means to copy a file from your computer to another.
- 2.9 The term "thumbnail", in relation to a Web site on the Internet, refers to a small version of a larger graphical image that you usually can click to display the full-sized image.
- 2.10 The two main file formats for images on the web are GIF and TIF.

**3. Match words and phrases in column X with the closest related meaning/word(s)/phrase(s) in column Y. Enter your selection in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)**

X		Y	
3.1	System of electronically joined computers	A.	Cursor
3.2	Software that allows you to explore the Internet	B.	Network
3.3	Movable indicator on computer screen	C.	Download
3.4	Visit to a Web site	D.	Virus
3.5	To start up a computer	E.	Browser
3.6	Digital infection or poison	F.	Hit
3.7	To confirm the identity of a computer user	G.	Authenticate
3.8	Connecting device between computers over a phone line	H.	Boot
3.9	Central computer sharing resources and data with other computers on a network	I.	Server
3.10	To copy a file or program onto a personal computer	J.	Modem
		K.	Compress
		L.	Pixel
		M.	Link
		N.	Scanner
		O.	Log on

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)

<b>A.</b>	Download	<b>B.</b>	Upload	<b>C.</b>	Network
<b>D.</b>	Search Engine	<b>E.</b>	Hacker	<b>F.</b>	URL
<b>G.</b>	Internet Service Provider	<b>H.</b>	Keyboard	<b>I.</b>	System Administrator
<b>J.</b>	Motherboard	<b>K.</b>	Homepage	<b>L.</b>	Virus
<b>M.</b>	Boot up	<b>N.</b>	Internet	<b>O.</b>	CPU
<b>P.</b>	Floppy Disk	<b>Q.</b>	Hard Copy	<b>R.</b>	Soft Copy
<b>S.</b>	Worm	<b>T.</b>	Web Browser	<b>U.</b>	Attachment

- 4.1 A global network connecting millions of computers, used to exchange data, news and opinions is known as \_\_\_\_\_.
- 4.2 \_\_\_\_\_ is the first document, users see when they enter a site on the World Wide Web.
- 4.3 \_\_\_\_\_ is a program that searches documents for specified keywords and returns a list of the documents where the keywords were found. Example: Alta Vista and Excite.
- 4.4 \_\_\_\_\_ is a group of 2 or more computer systems linked together by telephone lines, cables or radio waves.
- 4.5 \_\_\_\_\_ is abbreviated ISP; a company that provides access to the Internet.
- 4.6 \_\_\_\_\_ is a file attached to an email.
- 4.7 \_\_\_\_\_ is a computer enthusiast or expert who gains unauthorized access to computer systems for the purpose of stealing and corrupting data.
- 4.8 \_\_\_\_\_ is a program that is loaded onto your computer without your knowledge, runs against your wishes and can also replicate itself; an unwanted program that is dangerous because it can quickly use all available memory and bring the system to a halt.
- 4.9 \_\_\_\_\_ is a abbreviation for Uniform Resource Locator, the global address of documents and other resources on the World Wide Web.
- 4.10 \_\_\_\_\_ is an individual responsible for maintaining a multi-user computer system. Typical duties include; Adding and configuring new workstations, setting up user accounts, installing system-wide software.

**PART TWO**  
(Attempt any **FOUR** questions)

- 5.**
- a) What is the function of transport layer in OSI model?
  - b) What is a router? What is its use in networking? What protocol is used by routers to select the best route and to communicate with each other?
  - c) Differentiate between:
    - i) LAN and WAN
    - ii) Synchronous and asynchronous transmission

**(3+6+6)**

- 6.**
- a) Why are Domain names required? What is the relationship between domain names and IP addresses?
  - b) With reference to the Internet what is a "Cookie"? Briefly list some of the important utilities of cookies.
  - c) What is a 'Browser'? List the major browsers available. Also list the main features on which the browsers can differ from each other.

**(5+5+5)**

- 7.**
- a) Describe the importance of search engines to the success of the Web and discuss the characteristics of a successful search engine.
  - b) Write HTML Script to create the following web page

**List 1.**

- 1. Part 1
- 2. Part 2
- 3. Part 3

**List 2.**

- Section 1
- Section 2
- Section 3

- c) What is an e-mail? How e-mails are sent and received? Which protocols are used for sending and receiving mails?

**(5+5+5)**

- 8.**
- a) Briefly explain the following terms
    - i) MIME
    - ii) IMAP
  - b) How can you make your e-mail transaction more secure?
  - c) What is FTP and why do you need it?

**(6+3+6)**

- 9.** Write short notes on any **three** of the following:

- a) CGI
- b) JAVA and JAVA Script
- c) Firewalls
- d) Software Piracy

**(5+5+5)**