

M3-R3: 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 Computers on the internet owned and operated by educational institutions form part of the
 - A) com domain
 - B) edu domain
 - C) mil domain
 - D) None of the above
 - 1.2 Unix is
 - A) A person
 - B) A file
 - C) A program for copying files from one computer to another
 - D) An Operating system
 - 1.3 The Internet protocol (IP)
 - A) Ensures that connections are maintained between computers.
 - B) Handles software computer addresses.
 - C) Finds the quickest route between two computers.
 - D) None of the above.
 - 1.4 The method of transferring files with roots in Unix is
 - A) Bin Hex
 - B) Unencoding
 - C) FTP
 - D) Telnet

- 1.5 A web publishing tool developed by Microsoft is
- A) Netscape Navigator
 - B) Front Page
 - C) Page Mill
 - D) Hot Metal
- 1.6 In time division multiplexing (TDM)
- A) Several signals are sent on separate channels
 - B) Several signals are sent in time slotted mode on a channel
 - C) One signal is sent to several users
 - D) None of the above
- 1.7 SMTP is a simple
- A) TCP protocol
 - B) TCP/IP protocol
 - C) IP protocol
 - D) None of the above
- 1.8 On the internet, which version of the Internet Protocol is the most widely used?
- A) IPv1
 - B) IPv3
 - C) IPv4
 - D) IPv6
- 1.9 Web pages are uniquely defined using
- A) IP addresses
 - B) URL
 - C) Domain
 - D) Filename
- 1.10 What is a cookie?
- A) Computer code used to show animations and play sound.
 - B) Information sent to your computer that is used later to give information back to a visited web site.
 - C) Computer code that automatically records all purchases and payments you make from your computer.
 - D) An advertisement that will at some time be displayed on your computer screen.

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 All web addresses start with http:\\
- 2.2 In a ring topology, any node can communicate with any other node directly.
- 2.3 SMTP is associated with electronic mail.
- 2.4 A single hypertext document can contain link to one document on the World Wide Web.
- 2.5 HTML does not allow construction dynamic web pages.
- 2.6 JPEG is a lossless compression technique.
- 2.7 IP addresses are unique.
- 2.8 There are upto six levels of header tag in HTML.
- 2.9 WAN is based on Ethernet.
- 2.10 Asynchronous communication is slower than synchronous communication.

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	
	One of the commonly used web browser	A.	Pixel
	A video-standard commonly used on internet	B.	Freeware
	Basic unit of an on-screen image	C.	encryption
	Software available for trial period after which it must be registered to use	D.	Band width
	Scrambling of a message for security	E.	Link
	Data carrying capacity of a channel	F.	TCP/IP
	Related site on Internet	G.	Byte
	Set of protocols that handles data transmitted across the Internet	H.	Internet Explorer
	IP address	I.	MPEG-4
	The electronic device in a modem that decodes an incoming signal and extracts data	J.	Shareware
		K.	170.113.242.2
		L.	Altavista
		M.	JPEG
		N.	Demodulator

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)

A.	v-chat	B.	FTP	C.	Applet
D.	Modem	E.	DSL	F.	Unzip
G.	Ethernet	H.	URL	I.	Kbps
J.	DHCP	K.	Browser	L.	Cookie
M.	Band width	N.	Two	O.	VRL
P.	Bit				

- 4.1 Device for translating digital signals into analog signals and vice versa is called a(n) _____.
- 4.2 The address of a page on the World Wide Web is called _____.
- 4.3 The speed of your net access is defined in terms of _____.
- 4.4 An information file placed on your computer by a web page that one has visited is known as _____.
- 4.5 _____ is a small Java program that can be embedded in an HTML page.
- 4.6 _____ a Client program (software) that is used to look at various kinds of Internet resources.
- 4.7 _____ is a protocol by which a machine can obtain an IP number (and other network configuration information) from a server on the local network.
- 4.8 _____ is a method for moving data over regular phone lines.
- 4.9 _____ is a very common method of networking computers in a LAN.
- 4.10 _____ is a way to login to another Internet site for the purposes of retrieving and/or sending files.

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

- 5.**
- a) Give the HTML program segment for collecting information using forms. Information is name and comment.
 - b) What are the two different types of Newsgroups, explain?
 - c) What does the term Usenet mean?

(8+4+3)

- 6.**
- a) What do you understand by the term URL? What are the different components that make an URL?
 - b) What is the difference between Internet and World Wide Web? Explain.
 - c) Give the five different headers specified in MIME?

(5+5+5)

- 7.**
- a) Describe the function of a router and why it is important.
 - b) Explain with diagram the differences between star, ring and bus topologies.
 - c) The Domain Name System (DNS) plays an integral part in the functionality of the Internet. Describe the functionality of DNS and its component parts.

(5+5+5)

- 8.**
- a) What are the Internet security Threats? Explain how can they be avoided?
 - b) Define a firewall. What are its benefits?
 - c) What is the difference between dynamic and static web sites?

(8+4+3)

- 9.**
- a) What is the main purpose of Telnet? What model does Telnet follow? Write a short note on how it operates?
 - b) What is VRML? How does it differ from HTML?

(8+7)