M2-R4: INTERNET TECHNOLOGY AND WEB 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.**   **(1x10)**

1.1   Access control is implemented using
A)   Cache
B)   Firewall
C)   Hyperlinks
D)   JSP

1.2   Domain names are converted to
A)   a binary string
B)   alphanumeric string
C)   IP addresses
D)   a hexadecimal string

1.3   It is possible to display pictures in HTML specification by using the tag.
A)   <GR src = Picture file>
B)   <PIC src =Picture file>
C)   <IMG src =Picture file>
D)   <GIF src=Picture file>

1.4   Desirable properties of a website are
         i)   a meaningful address
         ii)   help and search facilities
         iii)   links to related sites
         iv)   features to allow users to give feedback
         v)   hosting on a mainframe

A)   i), ii), iii)
B)   i), ii), iii), iv)
C)   i), ii), iii), iv), v)
D)   i), ii), iii), v)

1.5   URL specifies the following:
        i)   protocol used
        ii)   domain name of server hosting web page
        iii)   name of folder with required information
        iv)   name of document formatted using HTML
        v)   the name of ISP
A)   i), ii), iii), iv)
B)   ii), iii), iv), v)
C)   i), iii), iv)
D)   i), ii), iii), v)

1.6   A search engine is a program to search
A)   for information
B)   web pages
C)   web pages for specified index terms
D)   web pages for information using specified search terms

1.7   XML is
A)   superset of HTML
B)   Extensible Markup Language
C)   part of DHTML
D)   presentation language

1.8   A world wide web contains web pages
A)   residing in many computers
B)   created using HTML
C)   with links to other web pages
D)   residing in many computers linked together using HTML

1.9   By an extranet we mean
A)   an extra fast computer network
B)   the intranets of two co-operating organizations interconnected via a secure leased line
C)   an extra network used by an organization for higher reliability
D)   an extra connection to internet

1.10   Plug-in is a
A)   Software
B)   Hardware
C)   Software and hardware both used for specific purpose
D)   Flash player

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.** (1x10)

2.1 Browsers uses compiler for web page display.

2.2 Internet data is broken up as variable length packets.

2.3 www is another name for internet.

2.4 ASP pages are active web pages.

2.5 URI stands for universal resource indicator.

2.6 A URL specifies the name of ISP.

2.7 HTML is similar to a scripting language.

2.8 HTML uses user defined tags.

2.9 SAX is parser for XML processing.

2.10 The time taken by internet packets can be predetermined before transmission.

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.** (1x10)

	X		Y
3.1	Dynamic web page creation	**A.**	keywords
3.2	E-mail address must have	**B.**	SGML
3.3	Indian ISP	**C.**	EDI
3.4	META Tag	**D.**	Patent Law
3.5	Server Pages	**E.**	SET
3.6	Data Interchange	**F.**	ITACT2000
3.7	Copyright are protected by	**G.**	VSNL
3.8	Protocol responsible for hypertext transmission	**H.**	TCP/IP
3.9	Algorithm for encryption	**I.**	JSP
3.10	Markup Language	**J.**	@ sign
		K.	JavaScript
		L.	HTTP
		M.	CGI

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.** (1x10)

A.	HTML	B.	server	C.	web authoring
D.	EDI	E.	content	F.	media
G.	interpreter	H.	compiler and interpreter both	I.	search engine
J.	distraction	K.	client	L.	messenger
M.	protect				

4.1 For IRC client machines need _____ software.

4.2 JSP is _____ side scripting language.

4.3 Browser use _____ for web page presentation.

4.4 Electronic data are transmitted between two devices through _____.

4.5 Image map can be created by _____.

4.6 History in a web browser is used to stop user _____.

4.7 Firewall is a software to _____ computer.

4.8 Java class execution needs _____.

4.9 Indexing is mechanism used by _____.

4.10 Netbeans and Eclipse are _____ tool.

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

5.

a) How HTML is related to SGML? Write HTML code for creating the following layout.

Username: [   ] [Submit]

b) What is E-commerce? Which act governs the activities of e-commerce in India? Give some application of E-Commerce.

c) Write the HTML code for creating the following layout.

Heading	Another Heading
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

(5+6+4)

6.

a) What is centralized domain name mechanism? What are the problems with such a mechanism?

b) Illustrate the complete life cycle of an e-mail message.

c) Give the internal architecture of a web browser.

(5+5+5)

7.

a) Compare between TCP versus UDP. Which one is more useful than the other?

b) Write the name of OSI network layers. Describe how communication takes place between two host using OSI layers with the help of block diagram.

(7+8)

8.

a) What is hypertext? How is it related to hypermedia? Give examples.

b) What is copyright infringement? How is it taking place?

c) How symmetric key cryptography is different from asymmetric key cryptography?

(4+4+7)

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

a) IRC

b) TELNET

c) Search Engine

d) FTP

(3x5)