

## A2-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 TCP is a commonly used protocol at
    - A) Applications layer
    - B) Network layer
    - C) Transport Layer
    - D) Physical Layer
  - 1.2 The domain name in an URL refers to the
    - A) protocol
    - B) server
    - C) filename
    - D) directory
  - 1.3 Cell base architecture is known as
    - A) LAN
    - B) ATM
    - C) FDDI
    - D) Client-Server
  - 1.4 Telnet is
    - A) Terminal network
    - B) Telephone network
    - C) Telecommunication network
    - D) Terrestrial network
  - 1.5 A software that prevents external access to a system is termed as
    - A) Gateway
    - B) Firewall
    - C) Intrusion Prevention system
    - D) Anti-Virus

- 1.6 A valid e-mail address is
- A) Vml.@india.com
  - B) @vrm@india.com
  - C) Vrm.india.com
  - D) vrm@india.com
- 1.7 A web publishing tool developed by Microsoft is
- A) Navigator
  - B) Hot Metal
  - C) Pagemill
  - D) Front Page
- 1.8 Which of the following cable types is generally associated with the linear bus topology
- A) Unshielded twisted pair
  - B) Fiber Optic
  - C) Thin coaxial cable
  - D) Telephone cable
- 1.9 Error detection at a data link level is achieved by
- A) Parity
  - B) Cyclic redundancy code
  - C) Hamming code
  - D) Equalization
- 1.10 On Internet, which version of the Internet Protocol is the most widely used
- A) Ipv1
  - B) IPv6
  - C) IPv2
  - D) IPv4

**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 Web traffic on Internet is transferred using FTP.
- 2.2 ASP is the product of Microsoft.
- 2.3 Download means to copy a file from your computer to another.
- 2.4 When the cursor pointer changes to a hand you are over a hyperlink.
- 2.5 SMTP protocol is used by a mail client program to fetch mail from mail server
- 2.6 JavaScript is the default scripting language in ASP.
- 2.7 ‘HTTPS’ traffic is encrypted traffic.
- 2.8 WAN is based on Ethernet.
- 2.9 GIF format is suitable to save a full color photograph.
- 2.10 A web browser is also referred to as a web client.

**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	Backbone	A.	Wireless network
3.2	Wi-Fi	B.	Internet on serial interface
3.3	Ping	C.	Mail
3.4	Throughput	D.	Remote access
3.5	SLIP	E.	connects two local-area networks
3.6	RDP	F.	File transfer
3.7	POP3	G.	Hypertext
3.8	NNTP	H.	telecommunications network
3.9	ISDN	I.	Usenet
3.10	Bridge	J.	connects large networks
		K.	Communication speed
		L.	Check network errors
		M.	Routing protocol

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)

<b>A.</b>	Client program	<b>B.</b>	Java	<b>C.</b>	Gateway	<b>D.</b>	POP3
<b>E.</b>	UDP	<b>F.</b>	CGI	<b>G.</b>	Web Server	<b>H.</b>	FDDI
<b>I.</b>	JavaScript	<b>J.</b>	VRML	<b>K.</b>	Search Engine	<b>L.</b>	Header
<b>M.</b>	Router						

- 4.1 \_\_\_\_\_ is a device containing software that help in determining the best path out of the available paths.
- 4.2 An application receiving data is called \_\_\_\_\_.
- 4.3 A local area network technology that uses fiber optics to interconnect station in a ring topology is \_\_\_\_\_.
- 4.4 \_\_\_\_\_ help to locate PDF files on internet.
- 4.5 A simple protocol used for fetching e-mail from a remote mailbox is \_\_\_\_\_.
- 4.6 \_\_\_\_\_ was originally developed by Netscape for client side validation.
- 4.7 \_\_\_\_\_ is used to deliver web pages and other content to multiple users on Internet.
- 4.8 Virtual worlds are created using a computer language called \_\_\_\_\_.
- 4.9 \_\_\_\_\_ is an address used as an entry point into another network.
- 4.10 \_\_\_\_\_ is a standard way in which the web interacts with outside resources, such as a database.

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

- 5.**  
a) Describe OSI reference model with layered approach.  
b) Write an html program segments to print unordered, ordered lists.  
c) Define E-commerce. What is the impact of E-commerce?  
**(5+5+5)**
- 6.**  
a) What is the network topology? Discuss the STAR topology.  
b) How e-mail is delivered using Internet?  
c) How to prevent Cyber Crime?  
**(5+5+5)**
- 7.**  
a) Write HTML commands to achieve the following:  
i) Put a Level two heading 'I am at top'.  
ii) Put 'I am BOLD' in bold typeface.  
iii) Render 'I am BIG' in a larger font.  
iv) Render 'I am SMALL' in a smaller font.  
v) Provide a link to <http://www.microsoft.com>  
b) What are the advantages of twisted-pair wire?  
**(10+5)**
- 8.**  
a) Explain Web Publishing. Write about any publishing tool.  
b) Explain what is a firewall and what it is used for? How are firewalls implemented?  
c) What is IRC? Give any six commands used in IRC.  
**(5+5+5)**
- 9.** Write short notes on any **three** of the following:  
a) Search Engines.  
b) FTP with an example to upload a large number of mp3 files.  
c) JavaScript.  
d) What is a cookie? How are they used on Internet?  
**(5x3)**