

No. of Printed Pages : 8

Sl. No.

**B1.2-R4 : INTERNET TECHNOLOGY AND WEB DESIGN**

**DURATION : 03 Hours**

**MAXIMUM MARKS : 100**

OMR Sheet No. :

Roll No. :

Answer Sheet No. :

Name of Candidate : \_\_\_\_\_ ; Signature of Candidate : \_\_\_\_\_

**INSTRUCTIONS FOR CANDIDATES :**

- Carefully read the instructions given on Question Paper, OMR Sheet and Answer Sheet.
- Question Paper is in English language. Candidate has to answer in English language only.
- There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.
- **PART ONE** is Objective type and carries **40** Marks. **PART TWO** is Subjective type and carries **60** Marks.
- **PART ONE** is to be answered in the **OMR ANSWER SHEET** only, supplied with the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book for **PART TWO**.
- 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** to the Invigilator.
- **Candidate cannot leave the examination hall/room without signing on the attendance sheet and handing over his/her Answer Sheet to the invigilator. Failing in doing so, will amount to disqualification of Candidate in this Module/Paper.**
- After receiving the instruction to open the booklet and before answering the questions, the candidate should ensure that the Question Booklet is complete in all respects.

**DO NOT OPEN THE QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

**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 "OMR" answer sheet supplied with the question paper, following instructions therein.**

**(1x10)**

- 1.1** Internet protocol includes :

- (A) Ethernet
- (B) ARCnet
- (C) TCP/IP
- (D) MAC

- 1.2** System in a computer which translates an address into an easier name is called :

- (A) Packet-switching domain system
- (B) Domain name system
- (C) Domain
- (D) Domain numbering system

- 1.3** What is Phishing ?

- (A) Sending data to hacker
- (B) Some-one sends legitimate-looking emails to users
- (C) Search automatically for an item on the internet
- (D) Checking the spelling of websites

- 1.4** Which of the following transport layer protocol is used to support electronic mail ?

- (A) SMTP
- (B) IP
- (C) TCP
- (D) UDP

- 1.5** Speed of internet is measured in \_\_\_\_\_.

- (A) GHz
- (B) Gbps
- (C) GB
- (D) dpi

- 1.6** A computer network enables two or more computers to :

- (A) Increase the speed
- (B) Share data and hardware resources
- (C) Increase the work
- (D) Monitor the software

- 1.7** Protocol which assigns IP address to the client connected to the internet is :

- (A) DHCP
- (B) IP
- (C) RPC
- (D) HTML

1.8 Programs that are automatically loaded and operated as a part of browser are known as :

- (A) Utilities
- (B) Plug-ins
- (C) Widgets
- (D) Add-ons

1.9 Website which is used to search other website by typing a keyword is :

- (A) Social network
- (B) Router
- (C) Search engine
- (D) Search page

1.10 Web crawler is also known as :

- (A) Link directory
- (B) Search optimizer
- (C) Web spider
- (D) Web manager

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and enter your choice in the "OMR" answer sheet supplied with the question paper, following instructions therein.

(1x10)

- 2.1 .com is representing education domain.
- 2.2 HTML is generally use for networking purpose.
- 2.3 The telnet protocol runs on TCP port 23.
- 2.4 UDP is a connectionless protocol.
- 2.5 Layer 7 is the application layer of the OSI model.
- 2.6 Extranet is a web within a web.
- 2.7 POP3, IMAP and FTP are all email protocols.
- 2.8 The standard protocol of the Internet is Ethernet.
- 2.9 To separate the single line `<ol>` and `</ol>` tag is used in HTML.
- 2.10 There are no collisions in full-duplex mode.

3. Match words and phrases in column X with the closest related meaning words(s) / phrase(s) in column Y. Enter your selection in the "OMR" answer sheet supplied with the question paper, following instructions therein.

( 1x10)

X		Y	
3.1	Ordered List in HTML	A.	MAC address
3.2	Length of MAC Address	B.	Demodulation
3.3	A program in HTML can be rendered and read by	C.	32 bits
3.4	Represented in hexadecimal format	D.	ol
3.5	Special formatting tag in HTML	E.	48 bits
3.6	The conversion of analog to digital is called	F.	XML
3.7	Extensible Markup Language	G.	Star
3.8	Program Code freely available	H.	Bus
3.9	Topology requires a central controller or hub	I.	IP address
3.10	Topology having less security and privacy	J.	Modulation
		K.	<pre>
		L.	Web browser
		M.	HTML

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Choose the most appropriate option, enter your choice in the "OMR" answer sheet supplied with the question paper, following instructions therein.

(1x10)

A.	UTP	B.	LAN	C.	WAN
D.	Host	E.	Electronic mail	F.	Modem
G.	Accessibility	H.	ARPANET	I.	IP address
J.	Simple Mail Transfer Protocol	K.	Simple Mode Texting Program	L.	Authentication
M.	Compiled				

- 4.1 Email stands for \_\_\_\_\_.
- 4.2 \_\_\_\_\_ is the technology that connects the machines and people within a site in a small area.
- 4.3 The equipment needed to allow home computers to connect to the Internet is called a \_\_\_\_\_.
- 4.4 The server on the Internet is also known as a \_\_\_\_\_.
- 4.5 The first network that has planted the seeds of Internet was \_\_\_\_\_.
- 4.6 A host on the Internet finds another host by its \_\_\_\_\_.
- 4.7 Verification of a login name and password is known as \_\_\_\_\_.
- 4.8 SMTP stands for \_\_\_\_\_.
- 4.9 JavaScript is a high-level, dynamic and \_\_\_\_\_ programming language.
- 4.10 The most common twisted-pair cable used in communication are \_\_\_\_\_.

**PART TWO**

**(Answer any FOUR questions)**

5. (a) Define network topology. What are the different types of network topologies ? Discuss about mesh topology in detail.  
(b) What is Cryptography ? Explain the difference between Private Key Cryptography and Public Key Cryptography.  
(c) Differentiate between applet and application  
(5+5+5)
6. (a) Explain most common internet cybercrimes.  
(b) Differentiate between packet switching and circuit switching.  
(c) Define URL. Also, explain the structure of URL.  
(5+5+5)
7. (a) Explain SMTP, FTP and HTTP protocol in detail.  
(b) What do you understand by Internet Security ? How a Firewall helps in achieving it ?  
(c) Explain the MIME in detail.  
(5+5+5)

8. (a) What is firewall ? Briefly explain different types of firewalls.  
(b) Explain the LAN and MAN networks with their features and example.  
(8+7)
9. Write short note on **any three** of the following :
- (a) Internet Phone  
(b) POP3  
(c) Meta Search Engines  
(d) HTML Frames  
(3x5)

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**SPACE FOR ROUGH WORK**

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