B1.2-R4: INTERNET TECHNOLOGY & WEB DESIGN

«QP_SRLNO»

अवधि: 03 घंटे
DURATION: 03 Hours

अधिकतम अंक: 100
MAXIMUM MARKS: 100

ओएमआर शीट सं.:
OMR Sheet No.:

रोल नं.:
Roll No.:

उत्तर-पुस्तिका सं.:
Answer Sheet No.:

परीक्षार्थी का नाम:
Name of Candidate: _____ ; **Signature of candidate:** _____

परीक्षार्थियों के लिए निर्देश: / Instructions for Candidate:

परीक्षार्थियों के लिए निर्देश:	Instructions for Candidate:
कृपया प्रश्न-पुस्तिका, ओएमआर शीट एवं उत्तर-पुस्तिका में दिये गए निर्देशों को ध्यान पूर्वक पढ़ें।	Carefully read the instructions given on Question Paper, OMR Sheet and Answer Sheet.
प्रश्न-पुस्तिका की भाषा अंग्रेजी है। परीक्षार्थी केवल अंग्रेजी भाषा में ही उत्तर दे सकता है।	Question Paper is in English language. Candidate can answer in English language only.
इस मॉड्यूल/पेपर के **दो भाग** है। **भाग एक** में चार प्रश्न और **भाग दो** में पाँच प्रश्न है।	There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.
भाग एक "वैकल्पिक" प्रकार का है जिसके कुल अंक 40 है तथा **भाग दो**, "व्यक्तिपरक" प्रकार है और इसके कुल अंक 60 है।	**PART ONE** is Objective type and carries 40 Marks. **PART TWO** is subjective type and carries 60 Marks.
भाग एक के उत्तर, इस प्रश्न-पत्र के साथ दी गई **ओएमआर** उत्तर-पुस्तिका पर, उसमें दिये गए अनुदेशों के अनुसार ही दिये जाने है। **भाग दो** की उत्तर-पुस्तिका में **भाग एक** के उत्तर **नहीं** दिये जाने चाहिए।	**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**.
भाग एक के लिए अधिकतम समय सीमा **एक घण्टा** निर्धारित की गई है। **भाग दो** की उत्तर-पुस्तिका, **भाग एक** की उत्तर-पुस्तिका जमा कराने के पश्चात दी जाएगी। तथापि, निर्धारित एक घंटे से पहले **भाग एक** पूरा करने वाले परीक्षार्थी **भाग एक** की उत्तर-पुस्तिका निरीक्षक को सौंपने के तुरंत बाद, **भाग दो** की उत्तर-पुस्तिका ले सकते हैं।	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.**
परीक्षार्थी, उपस्थिति-पत्रिका पर हस्ताक्षर किए बिना एवं अपनी उत्तर-पुस्तिका, निरीक्षक को सौंपे बिना, परीक्षा हाल नहीं छोड़ सकता हैं। ऐसा नही करने पर, परीक्षार्थी को इस मॉड्यूल/पेपर में अयोग्य घोषित कर दिया जाएगा।	**Candidate cannot leave the examination hall/room without signing on the attendance sheet and handing over his Answer sheet to the invigilator. Failing in doing so, will amount to disqualification of Candidate in this Module/Paper.**
प्रश्न-पुस्तिका को खोलने के निर्देश मिलने के पश्चात एवं उत्तर देने से पहले उम्मीदवार यह जाँच कर यह सुनिश्चित कर ले कि प्रश्न-पुस्तिका प्रत्येक दृष्टि से संपूर्ण है।	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 respect.

_____

जब तक आपसे कहा न जाए तब तक प्रश्न-पुस्तिका न खोलें।
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 IPv6 addressed have a size of
A) 32 bits   B) 64 bits
C) 128 bits   D) 256 bits

1.2 TCP/IP is a _____ hierarchical protocol suite developed before the OSI model.
A) 7-layers   B) 5-layers
C) 4-layers   D) 3-layers

1.3 Raj can receive his e-mail, but he cannot send e-mail. Which of the following is most likely causing his problem?
A) POP3   B) SMTP
C) IMAP   D) UART

1.4 The 4 byte IP address consists of
A) Network Address   B) Host Address
C) Both A) and B)   D) None of the above

1.5 The default port for SMTP is:
A) 21   B) 23
C) 25   D) 80

1.6 In this topology there is a central controller or hub
A) Star   B) Mesh
C) Ring   D) Bus

1.7 A computer communication technology that provides a way to interconnect multiple computers across short distance is
A) LAN   B) WAN
C) MAN   D) None of the above

1.8 A webpage displays a picture. What tag was used to display that picture?
A) picture   B) image
C) img   D) src

1.9 What is the correct HTML for adding a background color?
A) <body color="yellow">
B) <body bgcolor="yellow">
C) <background>yellow</background>
D) <body background="yellow">

1.10 A proxy firewall filters at the
A) Physical layer   B) Application layer
C) Data link layer   D) Network layer

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 Mesh topology is highly reliable.

2.2 $255.0.0.0$ is default network mask for CLASS A.

2.3 Printer can be shared in LAN by many users.

2.4 POP is the incoming email server.

2.5 .com is represents education domain.

2.6 Internet Service Provider provides services for web hosting.

2.7 ASP is server side scripting language.

2.8 HTML is generally use for web designing purpose.

2.9 TELNET protocol is working on port 24.

2.10 UDP is used where the acknowledgement from receiver side must be needed.

ROUGH WORK SPACE:

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 "OMR" answer sheet supplied with the question paper, following instructions therein.** **(1x10)**

	X		Y
3.1	It is stateless protocol.	**A.**	ARPANET
3.2	It is used to create static web page.	**B.**	DNS
3.3	It can be accessed from any email client.	**C.**	ISDN
3.4	It is used to exchange different kinds of data files on the Internet: audio, video, images, application programs.	**D.**	FDDI
3.5	It is used to establish a direct connection between two nodes.	**E.**	IMAP4
3.6	First network to implement TCP/IP suite.	**F.**	ATM
3.7	It is token ring based protocol.	**G.**	IRC
3.8	It is hierarchical decentralized naming system for computers.	**H.**	SGML
3.9	It is used for digital transmission of voice, video, data and other network services over the traditional circuits.	**I.**	File Transfer Protocol
3.10	FTP	**J.**	PPP
		K.	HTML
		L.	HTTP
		M.	SLIP

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.	Repeater	**B.**	Router	**C.**	IRC
D.	MAC address	**E.**	<script>	**F.**	IP address
G.	SLIP	**H.**	<head>	**I.**	UDP
J.	E-Commerce	**K.**	ATM	**L.**	<!DOCTYPE>
M.	<style>				

4.1 _____ provides a universal platform to support commercial activities across the globe.

4.2 <meta> element can be added in the _____ section of HTML page.

4.3 _____ is mainly designed for group communication in discussion forums, but also allows one-on-one communication via private messages.

4.4 _____ is physical address of computer.

4.5 _____ is device which is used in Network layer.

4.6 _____ uses encodes data into small, fixed-sized packets.

4.7 Using _____ tag, you can add JavaScript in HTML document.

4.8 _____ is used to identify computer in network.

4.9 _____ is an encapsulation of the Internet Protocol designed to work over serial ports and modem connections.

4.10 The _____ declaration must be the very first thing in your HTML document, before the <html> tag.

ROUGH WORK SPACE:

PART TWO
(Answer any FOUR questions)

5.
a) Give difference between hub and switch.
b) Explain FDDI.
c) What is Network topology? List all topologies. Explain any three.

(3+4+8)

6.
a) What is firewall? Explain types of firewall.
b) Explain the use of SSL to secure the network.
c) What is the difference between LAN, MAN & WAN?

(5+5+5)

7.
a) What is HTML? Explain principals of web designing.
b) Explain IP addressing scheme.
c) Write a HTML code using TABLE tag and create following structure:

A	B	C	
D	E	F	G
H	I	J	
		K	

(5+5+5)

8.
a) What is CGI?
b) Explain domain name system.
c) Explain TCP/IP in brief.

(3+4+8)

9. Write short notes on:
a) WWW
b) Digital Signature
c) Search Engine

(5+5+5)

ROUGH WORK SPACE: