B1.2-R4 : INTERNET TECHNOLOGY AND WEB DESIGN

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 : _____

परीक्षार्थी के हस्ताक्षर :
; **Signature of Candidate :** _____

परीक्षार्थियों के लिए निर्देश :	Instructions for Candidates :
कृपया प्रश्न-पुस्तिका, ओएमआर शीट एवं उत्तर-पुस्तिका में दिये गए निर्देशों को ध्यानपूर्वक पढ़ें।	Carefully read the instructions given on Question Paper, OMR Sheet and Answer Sheet.
प्रश्न-पुस्तिका अंग्रेजी भाषा में है। परीक्षार्थी उत्तर लिखने के लिए केवल अंग्रेजी भाषा का ही प्रयोग कर सकते हैं।	Question Paper is in English language. Candidate has to answer in English language only.
इस मॉड्यूल/पेपर के **दो भाग** हैं। **भाग एक** में **चार** प्रश्न और **भाग दो** में **पाँच** प्रश्न हैं।	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 का 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 हैं। **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 पश्चात् 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** to the Invigilator.
परीक्षार्थी, उपस्थिति-पत्रिका पर हस्ताक्षर किए बिना और अपनी उत्तर-पुस्तिका, निरीक्षक को सौंपे बिना, परीक्षा हॉल/कमरा नहीं छोड़ सकते हैं। ऐसा नहीं 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/her 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 पश्चात् एवं उत्तर लिखना आरम्भ करने से पहले उम्मीदवार यह जाँच कर सुनिश्चित कर लें कि प्रश्न-पुस्तिका प्रत्येक दृष्टि से संपूर्ण है।	After receiving the instruction to open the booklet and before starting to answer 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 Questions; each question carries ONE marks)

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 Which of the following is not supported by pure HTML (without any client or server side scripting) ?

(A) Refreshing the page automatically

(B) Redirecting the page

(C) Embeding web objects from different sites into the same page

(D) None of the above

1.2 The code for adding background in HTML is :

(A) <background>yellow<Background>

(B) <body color = "yellow">

(C) <body bgcolor = "yellow">

(D) <body bg ="yellow"

1.3 Which of the following is correct about extranet ?

(A) an extra network used by an organization for higher reliability

(B) an extra connection to internet provided to co-operating organization

(C) the intranets of two co-operating organizations interconnected via a secure leased line

(D) none of the above

1.4 Which of the following identifies a specific web page and its computer on web ?

(A) Web site address

(B) Web site

(C) Domain Name

(D) URL

1.5 ARPANET stands for ?

(A) Advanced Research Project Agency Network

(B) Advanced Research Programmed Auto Network

(C) Advanced Research Project Automatic Network

(D) Advanced Research Project Authorized Network

1.6 Which of the following is light-weighted protocol ?

(A) TCP

(B) UDP

(C) Both TCP and UDP

(D) None of the above

1.7 Internet access by transmitting digital data over the wires of a local telephone network is provided by :

(A) Leased line

(B) Digital subscriber line

(C) Digital signal line

(D) Digital leased line

1.8 FTP is built on _____ architecture.

(A) Client server

(B) Peer to peer

(C) Data centric

(D) Service Oriented

1.9 Which of the following describe e-commerce ?

(A) Doing business electronically

(B) Doing business

(C) Sales of goods

(D) All of the above

1.10 Which of the following is Email protocols ?

(A) POP3

(B) SMTP

(C) MIME6

(D) All of the above

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 Navigator is server-side JavaScript.

2.2 Internet can help you find the shortest route.

2.3 Data Link is a layer in TCP/IP protocol.

2.4 ISP exchanges internet traffic between their networks by internet exchange point.

2.5 FTP uses 4 parallel TCP connections to transfer a file.

2.6 C2B is one of the major type of e-commerce.

2.7 IMAP4 is a protocol for Email communication.

2.8 The tag <href> is used for link in HTML.

2.9 The output of A + B in VBScript is 510 if A = 5 and B = 10 ?

2.10 Network layer firewall works as a packet filter.

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)

	Column X		Column Y
3.1	A standard for defining generalized markup languages for documents	**A.**	ARP
3.2	an application-layer Internet standard protocol used by e-mail clients to retrieve e-mail from a mail serve	**B.**	Search engine
3.3	a communication protocol used for discovering the link layer address	**C.**	Interoperability
3.4	a circuit-switched telephone network system that transmits both data and voice over a digital line.	**D.**	MIME
3.5	a telecommunications standard for digital transmission of multiple types of traffic, including telephony (voice), data, and video signals in one network	**E.**	SGML
3.6	a software system that is designed to carry out web searches	**F.**	IRC
3.7	an Internet standard that extends the format of email messages to support text in character sets other than ASCII	**G.**	ATM
3.8	application software designed to help people working on a common task to attain their goals	**H.**	WWW
3.9	a cryptographic system that uses pairs of keys	**I.**	ISDN
3.10	The ability of a system to work with other system or product without much efforts	**J.**	Collaborative software
		K.	asymmetric cryptography
		L.	POP3
		M.	Address Book

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.	Packet switching	B.	Dialup connection	C.	Network security	D.	DNS
E.	FDDI	F.	IRC	G.	SMTP	H.	Document interchange standard
I.	HTTP	J.	Frames	K.	VB script	L.	Firewalls
M.	Bandwidth						

4.1 _____ is the concept of businesses electronically communicating documents that was traditionally communicated on paper.

4.2 Development of _____ was initiated by Tim Berners-Lee at CERN in 1989.

4.3 A _____ typically establishes a barrier between a trusted network and an untrusted network, such as the Internet.

4.4 _____ is the maximum rate of data transfer across a given path.

4.5 A _____ is a part of a web page or browser window which displays content independent of its container.

4.6 _____ provides a 100 Mbit/s optical standard for data transmission in local area network.

4.7 _____ allows Microsoft Windows system administrators to generate powerful tools for managing computers with error handling.

4.8 _____ use modems to decode audio signals into data to send to a router or computer.

4.9 _____ is a method of grouping data into packets that are transmitted over a digital network.

4.10 _____ is implemented as an application layer protocol to facilitate communication in the form of text.

PART TWO

(Answer ANY FOUR questions)

5. (a) What are the 5 major applications of internet ?

(b) What is a packet switched technology? Which technology uses packet switching for communication ?

(c) What are the two types of Internet addressing scheme ? Explain the difference between IP address and MAC address. **(5+5+5)**

6. (a) Describe the difference between LAN, MAN and WAN.

(b) Observe the following table and write the HTML code to generate it :

Time Table					
	Mon	**Tue**	**Wed**	**Thu**	**Fri**
	Science	Maths	Science	Maths	Arts
Hours	Social	History	English	Social	Sports
	Lunch				
	Science	Maths	Science	Maths	Project
	Social	History	English	Social	

(5+10)

7. Write short note on the following :

(a) FDDI

(b) SMTP(Simple Mail Transfer Protocol)

(c) Telnet **(5+5+5)**

8. (a) Define the structure of Email by describing each component in detail.

(b) Write the HTML code to generate the following output of a table with the content exactly in the same format as shown within the table :

ADMNO	SNAME	NAME	DOB
JS04567	Agrawal	Rajesh	04-Mar-1998

(c) What are the various network topologies ? Explain in detail with examples.

(5+5+5)

9. (a) What is Firewall ? Explain the basic types of Firewalls

(b) What is JavaScript ? Write a JavaScript program to input any positive number in a Text Box and display whether it is a palindrome number or not ?

(5+10)

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SPACE FOR ROUGH WORK

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