Subject Code: 34

110142

2021

COMPUTER SCIENCE (E)

(Theory)

Full Marks: 80
Pass Marks: 24

Time: 3 hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer:							
	(a)	_	help computers and computer networks to connect Internet through telephone or cable lines.	to			
		(i)	Routers				
		(ii)	Modems				
		(iii)	Routers and modems				
		(iv)	None of the above				
	(b) Exploring information on the Web is called						
		(i)	World Wide Web				
		(ii)	Messages				
		(iii)	Wave page				
		(iv)	Web surfing				
(c) The attribute specifies an alternate text for an image.							
		(i)	alternate				
		(ii)	alt M				
		(iii)	alter				
		(iv)	None of the above				
/	(d)	A l	link to another page within the same Website is called				
		(i)	hyperlink				
		(ii)	internal link				
		(iii)	local link				
		(iv)	global link				

2. Fill in the blanks:



 $1 \times 3 = 3$

- (a) The XML code has a ____ structure.
- (b) The property of combining text using the '+' operator is called
- (c) The ____ loop is used to repeat statement(s) while the condition remains true.
- 3. State whether the following statements are True or False: 1×3=3
 - (a) do ... while loop is exactly the same as for loop.
 - (b) You can change the data type of an existing column by using the MODIFY TABLE command.
 - (c) Spyware is a computer program that secretly gathers information about the user and relays it to advertisers and other interested parties.
- 4. Answer the following questions in one word:

 $1 \times 8 = 8$

- (a) It is a local area network that uses high-frequency radio signals and/or infrared waves to send and receive data over short distances. What is it called?
- (b) It is the language that has revolutionized the presentation of information and data on the World Wide Web. What is it called?
- (c) These are powerful tools for organizing the contents of a Web page. What are these called?
- (d) These are used by programmers to include short explanations within the script for its better understanding. What are these called?

- (e) It comprises of three statements—initialization, condition and increment/decrement. What is it called?
- (f) It supports a number of data types of numeric, fraction, text and date & time. What is it called?
- (g) It is a data type which is used to store exact numeric values. What is it called?
- (h) It refers to any unsolicited and unwanted e-mail and it may carry advertisements or serve as a means of spreading viruses and worms. What is it called?

5. Answer the following questions:

 $2 \times 12 = 24$

- (a) Write a short note on the working of a modem.
- (b) What is HTML?
- (c) Write a short note on e-mail program.
- (d) What is CHAT?
- (e) Web browsers support a number of graphic formats. Write in short about two of them.
- (f) What is table in HTML5?
- (g) What is/are Tag(s)?
- (h) Write the differences between SIMPLE and COMPOUND STATEMENTS.
- (i) SQL commands are divided into five categories. What are those commands?

[Contd.

- (j) Write the syntax of the following:
 - (i) To select a database you want to work with.
 - (ii) To delete a database.



- (k) What is macro virus?
- (1) Write the ways of avoiding spam.

6. Answer the following questions:

 $3 \times 4 = 12$

- (a) What is a Web browser? Write the name of any three commonly used Web browsers. Also, mention the name of the first graphical Web browser.
- (b) Write three major disadvantages of e-learning to students.
- (c) What is an E-banking? E-banking can be broadly classified into two categories. Mention each with their involvement.
- (d) Write three differences between XML and HTML.

7. Answer the following questions:

 $4 \times 4 = 16$

- (a) What is E-shopping? Give some examples of E-shopping sites. What are the benefits of E-shopping?
- (b) What is XML element? Write at least three naming rules that must follow XML elements.
- (c) What is an ASSIGNMENT STATEMENT? Write the syntax of the following statements:
 - (i) if statement
 - (ii) if ... else statement
 - (iii) if ... else ... if statement

[Contd.

- (d) A loop comprises how many statements? What are they? Write general format of the following:
 - (i) while loop
 - (ii) do ... while loop
 - (iii) for loop

8. Answer the following questions:

 $1 \times 5 = 5$

- (a) Rohit wants to write HTML5 code so that he can make a link to a page on the same Website. But he is unable to write the appropriate code. Write the HTML5 code to get the desired result.
- (b) Rita wants to write HTML5 code so that she can make link to another Website. Help her to write appropriate HTML5 code so that she can achieve her goal.
- (c) Consider the following HTML5 code:

<h2 id = "bottom">Last Chapter </h2>
Write the correct HTML5 code to make a link to the bottom of
the same page.

- (d) Rian wants to create an e-mail link so that when a user click on the link, an e-mail client opens and the user can then send a message to that e-mail address. But Rian is unable to write the appropriate HTML5 code. Help him to write appropriate HTML5 code to accomplish the task.
 - (e) Ritu wants to have an image that is linked to some information related to that image, so that if someone clicks on the image, the user is directed to that information. With this view, she has written HTML5 code as

<href Src ="forest.gif">
But she is not getting the result. Identify the errors and write the correct code.

9. (a) A table is given as follows:

2+	3=	5
----	----	---

Data Type	Size	Constraints
INT		PRIMARY KEY
VARCHAR	20	NOT NULL
	11	NOT NULL
	1	It is either A, B or C
	Data Type INT VARCHAR VARCHAR CHAR	INT VARCHAR 20 VARCHAR 11

Based on the specification shown in the table, write the query for creating a table named "Customer".

- (b) Now you have a table named "Customer". Keeping view in mind with the table "Customer", answer the following questions:
 - (i) Write the query to display complete information about the fields defined in the table "Customer".
 - (ii) Write the command which is required to add data into the table.
 - √1eW * * * (iii) Write the query to view the table with inserted record(s).