Subject Code : 34

102010

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COMPUTER SCIENCE (E)

(Theory)

The figures in the margin indicate full marks for the questions
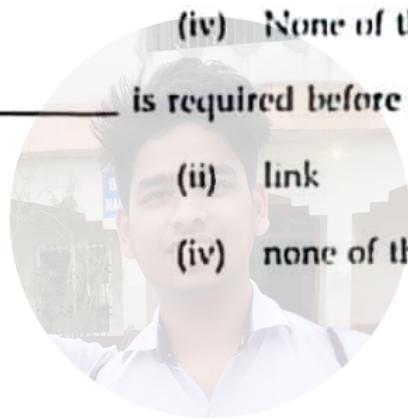
1. **Choose the correct answer :**   1x4=4

    (a) _____ adds the IP address of the sender and the destination to each packet so that it reaches the correct destination.

        (i)   TCP/IP   (ii)   Protocol

        (iii)   Internet Protocol (IP)   (iv)   TCP

    (b) Angry or heated messages are called _____.

        (i)   Netiquettes   (ii)   Temper

        (iii) Flames   (iv)   Alert

    (c) _____ format is best suited for images with transparencies or low color count.

        (i)   PNG   (ii)   JPEG

        (iii) GIF   (iv)   None of these

    (d) To send an e-mail, _____ is required before the address.

        (i)   src   (ii)   link

        (iii) 'mailto'   (iv)   none of these

2. **Fill in the blanks :**   1x3=3

    (a) _____ was designed to store, carry and exchange data.

    (b) _____ statement is used to write text on the webpage.

    (c) An early exit from a loop can be accomplished by using the _____ statement.

3. **State whether the following statements are true or false.**   1x3=3

    (a) The UPDATE TABLE command is used to modify the table structure.

    (b) Computer virus includes malware, spam, worms and spyware.

    (c) A malware is a program capable of reproducing and spreading itself to another computer system, usually by means of a computer network.

4. Answer the following questions in **one word** : 1x8=8

(a) This is a group who is responsible for developing and maintaining communication protocols, resolving problems and coordinating new services. What is it called ?

(b) It is one or more lines of text containing the sender's full name and address or whatever information he/she wishes to send with the e-mail message. What is it called ?

(c) It is a protocol that an e-mail client uses to download e-mails from an e-mail server. It is designed to let users to keep their e-mails on the server. What is it called ?

(d) It is a unidirectional pointer from the source document that contains the link to some destination within the same webpage, a different webpage, or even a different website. What is it called ?

(e) It is a statement that can only be used to compare an expression against constant. What is it called ?

(f) It is the third expression of a for loop that updates the variable number each time the loop is executed. What is it called ?

(g) These are the rules that helps to ensure the validity of the data while entering it in a table. What is it called ?

(h) It is a clause that can be used in SELECT statement to display only unique values of a table. What is it called ?

5. Answer any twelve of the following questions. 2x12=24

(a) Write short notes on web server with some suitable examples.

(b) What are the rules for naming a Javascript variable ?

(c) What is Digital Middleman ?

(d) Explain various components of a search engine.

(e) Differentiate between text-align and vertical - align properties. What values can be assigned to these properties ?

(f) What is the use of target attribute ? Mention different values that can be assigned to target attribute.

(g) What are the limitations of placing a comment in an XML documents.

(h) What do you mean by entity ? What are the two types of entities ?

(i) What is data types ? What are the different type of data types available in Javascript ?

(j) What is SQL ?

(k) What is the difference between ALTER and UPDATE command in SQL ?

(l) What are the rules for naming a table in MySQL ?

(m) What is Computer worm ?

(n) Mention any two uses of ICT in hospitals.

(o) What is Digital divide ?

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6. Answer any four of the following questions : 3x4=12

   (a) What is Network class ? What are the different classes of TCP/IP Network ?

   (h) Write some of the guidelines that need to be followed by all internet users while sending message(s).

   (c) What is well-formed XML document ? What are the rules for defining a well formed XML document ?

   (d) What is a loop ? What is the difference between while and do ... while loop ? What are the three statements comprising a for loop ?

   (e) What is an IP address ? What are the parts of an IP address ?

   (f) Will a for loop execute without initialization ? Explain with suitable example.

7. Answer any four of the following questions : 4x4=16

   (a) What is e-commerce ? What are the different kinds of e-commerce model available on internet, explain with an example of each.

   (b) What is an e-mail program ? Write any four features of an e-mail program.

   (c) What will be the output of the following code :

```
var  x, y, z
     x = 20, y = 10, z = 5
     x + = y
     y - = z
     z + = x
     + + x
     y - -
     z + +
document.write ("x="+x+"<1br>")
document.write("y="+y+"<1br>")
document.write ("z="+z)
```

   (d) What is XML parser ? What are the two types of XML parser ? Give an example of each.

   (e) Write a Javascript code to enter the day number and display the corresponding day name using switch statement.

   (f) "Use of e-governance has social and economic impacts". Justify.

8. Write HTML 5 code for the following :   1x5=5

   (a) Aashish has made a webpage using HTML5, he knows that, by default links open the current window. But he wants the link to open in another window. Help him to write an appropriate HTML code so that he will get the desired result.

   (b) He wants to have an image link so that if someone click the image, then he is directed to another page. Write the HTML 5 code for him to get his desired output.

   (c) He wants to divide his webpage in two frames of equal size. Suggest him to write the appropriate code to accomplish his task.

   (d) He wants to add a video file in the left frame which tag should he use to add video file to HTML 5 document. Help him to write the code for this purpose.

   (e) He also wants to play the video file automatically when the webpage is loaded. Which attribute should he use to play the video file automatically when his webpage is loaded. Suggest him to use appropriate attribute to perform the task.

9. (a) Write an appropriate MySQL queries that result into the following output :   2+3=5

EmpID	EmpName	DOJ	Department	B.Salary
E015	Rohit Sharma	1999-04-01	Civil	32,000
E017	Nirchan Ahmed	2001-07-21	Mechanical	32,000
E020	Ankur Barua	2003-12-11	Electronics	28,000
E022	Jatin Goswami	1994-01-10	Electronics	40,000

   (b) Write any three queries from the following :

   (i) Write a query to set the EmpID as the primary key of the above table.
   (ii) Write a query to add NOT NULL Constraints to the Department field.

   (iii) Write a query to display the records having B.Salary in the range 30,000 to 40,000.

   (iv) Write a query to display the records of employee whose names start with 'A'.

   (v) Write a query to change the Emp Name of EmpID, E015 from Rohit Sharma to Rohit Das.

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