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MCA454

Fourth Semester MCA Degree Examination, June/July 08
Introduction to Web Programming

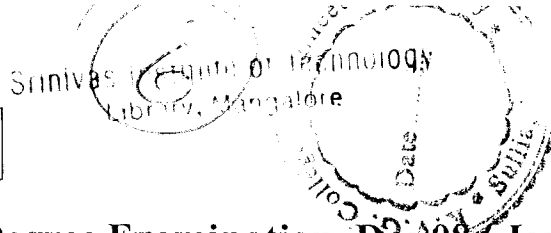Time: 3 hrs.   Max. Marks:100

Note : *Answer any FIVE full questions.*

1   a.   Create a simple HTML page which demonstrates use of three lists.   **(10 Marks)**
    b.   Give syntax and example for the following HTML tags :
      i) <a>   ii) <hrd>   iii) <tmt>   iv)   v) <table>   **(10 Marks)**

2   a.   What is a table in HTML? Explain with syntax and example.   **(08 Marks)**
    b.   What are the most commonly encountered image types on the web? How does the browser cope if it cannot handle an image type itself?   **(06 Marks)**
    c.   What are image maps? Explain with suitable example.   **(06 Marks)**

3   a.   What is the role of the HTML form? Also create a simple form, which accepts name, address, location and pin code. Use HTML   **(10 Marks)**
    b.   What sorts of the meta-information can be placed in the head of a document?   **(10 Marks)**

4   a.   Describe the different ways that styles can be added to a page.   **(08 Marks)**
    b.   Create a web page which uses prompt ( ) dialogs to ask a user for their name, age and shoe size. Display the information they enter on the page.   **(06 Marks)**
    c.   Explain any four Java script string manipulation functions with example.   **(06 Marks)**

5   a.   Create a HTML document using Java script to initialize array called-data with Monday, Tuesday---------Sunday. Print array elements along with index value on the document.   **(08 Marks)**
    b.   How does Java script fare as an object oriented language? Would it be correct to say that Java script is object based rather than object oriented?   **(06 Marks)**
    c.   Write a Java script that prompts you for a string and then a pattern and convert pattern into a RegExp object, which is used to search the string looking for a given pattern.   **(06 Marks)**

6   a.   What are events? What events can Java script handle? Write a script to demonstrate a few different events being created and handled.   **(10 Marks)**
    b.   List the difficulties that you might experience if you use Java script to perform data validation.   **(05 Marks)**
    c.   What are the basic data types in Perl? Explain.   **(05 Marks)**

7   a.   Explain any five Perl functions, which operate on arrays.   **(06 Marks)**
    b.   Write a Perl script, which accepts inputs from the user, stores all of the strings in an array, and then displays them in reverse order.   **(06 Marks)**
    c.   What are regular expressions? List special characters and operators used in regular expression.   **(08 Marks)**

8   a.   What are session IDS? How session IDS are created and validated? Explain with Perl code.   **(10 Marks)**
    b.   Write short notes on :
      i) CGI.PM   ii) Perl DBI   **(10 Marks)**

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MCA454

Fourth Semester MCA Degree Examination, Dec.08 / Jan.09
Introduction to Web Programming

Time: 3 hrs.   Max. Marks:100

Note : *Answer any FIVE full questions.*

1   a.   Briefly explain the following :
        i) WWW   ii) XML   iii) W3C   (06 Marks)
    b.   Describe the basic structure of an HTML document. What sorts of meta information can be placed in the head of a document.   (10 Marks)
    c.   What is a document type declaration and why it is needed?   (04 Marks)

2   a.   What is URL? Explain elements of URL.   (04 Marks)
    b.   Explain the following :
        i) <Applet>   ii) <Table>   iii) <img>   iv) <Form>   v) <a>   (10 Marks)
    c.   How do you embed frames in HTML? Give example.   (06 Marks)

3   a.   Define cascading style sheets. Describe the different techniques by which one can apply styles to HTML documents. Explain with suitable examples.   (10 Marks)
    b.   How rules and classes are defined in styles using an example? Explain. What are anonymous classes?   (10 Marks)
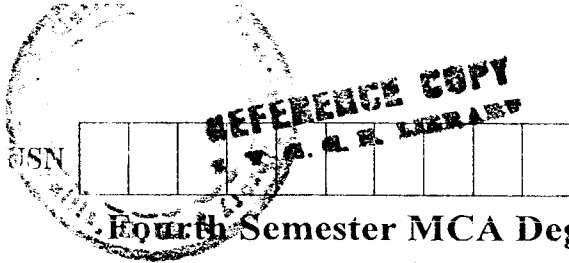
4   a.   With an example, give the basic structure of a Java script.   (04 Marks)
    b.   With an example, explain any four mathematical functions of Java script.   (08 Marks)
    c.   Explain the following object based array functions in Java script with example.
        i) concat   ii) join   iii) push   iv) slice   (08 Marks)

5   a.   Explain the regular expressions available in Java script. Create a web page having 2 fields. One to accept name and other to accept age. Validate both fields using regular script. If the data is valid, transmit the contents in an email message.   (10 Marks)
    b.   Explain the various Java script events that can be handled in Java script.   (10 Marks)

6   a.   What is image rollover? How image roll over is implemented in Java script? Explain.
                                                                          (06 Marks)
    b.   What are the basic data types in Perl?   (04 Marks)
    c.   Explain briefly the functions which operate on hashes in Perl.   (10 Marks)

7   a.   What is CGI? How the data can be parsed in CGI using GET and POST methods?
                                                                          (10 Marks)
    b.   Write a Perl program to accept names of ten students, store it into an array and display them in the reverse order.   (10 Marks)

8   Write short notes on the following :
    a.   Layers.
    b.   Browser objects.
    c.   HTTP header.
    d.   CGI Pm.   (20 Marks)

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07MCA43

Fourth Semester MCA Degree Examination, June-July 2009
Web Programming

Time: 3 hrs.   Max. Marks:100

Note : *Answer any FIVE full questions.*

1   a. Describe a fully qualified domain name and explain how fully qualified domain names are translated into IP.   **(06 Marks)**
    b. What is Hypertext Transfer Protocol? Describe the purposes of the five most commonly used HTTP methods.   **(10 Marks)**
    c. Differentiate between Web and Internet.   **(04 Marks)**

2   a. What is the difference between HTML and XHTML? Explain.   **(05 Marks)**
    b. What is the difference in the effect of a paragraph tag, break tag and pre tag?   **(05 Marks)**
    c. Create, test and validate an XHTML document that has a form with the following controls:
        i) A text box to collect the user name. ii) Four checkboxes, one each for the following items.   → Four 100 - watt light bulbs for $ 2.39
                       → Eight 100 - watt light bulbs for $ 4.29
                       → Four 100 - watt long life light bulbs for $ 3.95
        ii)   A collection of three radio buttons that are labeled as follows :
              * Visa   * Master card   * Discover.
        iii) Submit and Reset Buttons.   **(10 Marks)**

3   a. What is a CSS? Describe the different levels of style sheets and their precedence.   **(06 Marks)**
    b. List and explain the variety of selector forms with example.   **(08 Marks)**
    c. Create and test an XHTML document that describe an unordered list of atleast five popular books. Use style sheet to define different list items to have different bullet types.   **(06 Marks)**

4   a. Describe two walls to embed a Java Script in an XHTML document. Give example for each.
                                                                                                (06 Marks)
    b. Explain string properties and methods in Java Script.   **(07 Marks)**
    c. Write and test XHTML and Java Script files for reading three numbers, using prompt to get each and output the largest of the three numbers.   **(07 Marks)**

5   a. What is a DOM? Describe the DOM structure for simple document.   **(06 Marks)**
    b. Describe approach to addressing XHTML elements using
        i) Forms and elements   ii) Name attribute   iii) get Element By ID.   **(06 Marks)**
    c. What is an event and event handler? List any five most commonly used attributes related to events, tags that can include the attributes and circumstances under which the associated events are created.   **(08 Marks)**

6   a. What is the purpose of a DTD? Explain how elements attributes are declared in DTD with an example?   **(10 Marks)**
    b. Why would you use a CSS – Style Sheet for an XML documents?   **(04 Marks)**
    c. Define the purpose of XSLT style sheet. How does an XSLT processor use an XSLT style sheet with an XML document?   **(06 Marks)**

7   a. What are the three categories of perl variables? Give example for each.   **(06 Marks)**
    b. What is a file handle? Explain how files can be opened for input and output in perl.   **(07 Marks)**
    c. Describe basics of perl functions.   **(07 Marks)**

8   a. What is a querystring? Explain how query string is transmitted to the server with get and post method.   **(08 Marks)**
    b. What are cookies? Where cookies are stored? What is form of the value of a cookie?
                                                                                                (06 Marks)
    c. What is the purpose of the shortcuts in CGI.PM?   **(06 Marks)**

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07MCA43

Fourth Semester MCA Degree Examination, May/June 2010
Web Programming

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1 a. Write a note on response phase of HTTP.   **(05 Marks)**
   b. Differentiate between HTML and XHTML.   **(05 Marks)**
   c. What are the tags used in definition list? Create an XHTML document to illustrate nested list.   **(10 Marks)**

2 a. Create an XHTML document as shown below :   **(10 Marks)**

	Students intake		
	BE	MCA	M.Tech
2007	240	45	20
2008	260	60	30
2009	250	60	30

   b. What are the different levels of style sheets? Explain.   **(05 Marks)**
   c. Give examples for class selectors and generic selectors in CSS.   **(05 Marks**

3 a. Create an XHTML document that contains at least four lines of text. Every verb in the text must be red, every noun must be green and every preposition must be blue. **(05 Marks)**
   b. Give examples for different ways of creating arrays in javascript.   **(05 Marks)**
   c. Write XHTML code and javascript code to compute and print binomial coefficient of given 'n', 'r' values. (write javascript function to compute binomial coefficient) **(10 Marks)**

4 a. Give examples for pattern –matching methods of string in javascript. **(05 Marks)**
   b. Explain the different ways of accessing elements in javascript.   **(07 Marks)**
   c. Create an XHTML document that has text boxes for apple (80 Rs./kg), orange (40 Rs./kg) and grapes (40 Rs./kg) along with a button. Enter quantity of fruits in text boxes and compute total cost on click of button element.   **(08 Marks**

5 a. Create a dynamic XHTML document to illustrate absolute positioning of elements. **(05 Marks)**
   b. How stacking of elements can be done in dynamic XHTML?   **(05 Marks)**
   c. With an example, explain how an XSLT processor uses an XSLT style sheet with an XML document.   **(10 Marks)**

6 a. With examples, explain the string functions in perl.   **(10 Marks)**
   b. Write a perl program to read 'N' number of values, and then to compute and print sum and average of 'N' entered values.   **(10 Marks)**

7 a. Create a hash table in perl containing at least five entries of pair of car models and company as keys and values respectively. Write a perl program to read a car model and print its company. Print all entries in a hash table.   **(10 Marks)**
   b. With a program, explain cookies.   **(10 Marks)**

8   Write short notes on :
   a. Web servers
   b. The CGI
   c. XML processors
   d. The navigator object.   **(20 Marks)**

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