(vi) What will happen when user click on this link
       go to ... ?
      (a) Redirected to the web page specified in url
      (b) Reach to a particular anchor named "destination_lable" of web
          page specified in url
      (c) No visible action
      (d) Page not found error will appear.

(vii) Suppose your current location is http://www.heritagecse.com/html/and you
      want to reference the http://www.heritagecse.com/html/tutorial/help.aspx
      page using href attribute of <a>, what root relation URL should you use in href
      attribute?
      (a) /help.aspx   (b) /html/tutorial/help.aspx
      (c) /tutorial/help.aspx   (d) help.aspx.

(viii) The service() method is the main method to perform the actual task of
       servlet. Who is calling this service() method?
       (a) init() method
       (b) The servlet container (i.e. web server)
       (c) Requester (i.e. web browser)
       (d) None of them.

(ix) What is the effect of this CSS rule P: first-line {font-style: small-caps}?
      (a) Converts the content of a paragraph into capital letters
      (b) Converts the first line of a paragraph to small capital letters
      (c) Converts the content of a page to small capital letters
      (d) No visible effect.

(x)   Code: var fruits = ["Banana", "Orange", "Apple"];
              var energy = fruits._____(" , ");
      Output: Banana, Orange, Apple
      Fill in the blank in the code with correct option.
      (a) join   (b) slice   (c) splice   (d) split.

Group – B

2. (a) Explain briefly the structure of a client server architecture.

    (b) Why is Tiered architecture important and how many Tiers can an
        architecture have?

    (c) What are the differences between client side scripting and server side
        scripting? Give an example of client side scripting.

                                                    3 + 3 + (3 + 3) = 12

3. Develop an html form to accept following inputs from the user as shown below.
    Assume that Favorite color list contains three colors Purple, Red and Green.

                                                                          12

Group – C

4. (a) What is the difference between HTTP GET and POST method and
        where are they typically used?

    (b) What do you mean by the terms "well-formed" XML and "valid" XML?

    (c) Write the XSD and XML corresponding to a bookstore. Your example
        should have atleast 2 books.

                                                          3 + 3 + 6 = 12

5. (a) Car number plates in West Bengal are typically of the format
        WB06C8282. The first two letters correspond to the state followed by
        two digits, followed by an alphabet and then followed by 4 digits.
        Write a regular expression that will validate the above format.

    (b) What is the use of cookies in Javascript? Show with example how to get
        and set cookies in Javascript. (Note: Full program code is not needed.
        Only the code excerpts showing how to get and set cookies.)

    (c) Explain briefly with diagram the life cycle of a servlet.

                                                      2 + (3 + 3) + 4 = 12

Group – D

6. (a) Explain the steps of creating the web page by web server when you
        request a JSP page from your browser.

    (b) Write a Scriptlet in JSP to show the current date using appropriate
        page directive.

B.TECH/CSE/6TH SEM/CSEN 3282/2017

WEB TECHNOLOGIES
(CSEN 3282)

Time Allotted : 3 hrs   **Full Marks : 70**

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and
<u>any 5 (five)</u> from Group B to E, taking <u>at least one</u> from each group.

Candidates are required to give answer in their own words as far as practicable.

Group – A
(Multiple Choice Type Questions)

1. Choose the correct alternative for the following: **10 × 1 = 10**

   (i)   What is the function of this meta tag <META HTTP-EQUIV="Refresh" CONTENT="2"; URL="http://www.yoursite.com">?
         (a) No action on Browser
         (b) It will load yoursite.com instantly
         (b) Browser will be unresponsive
         (c) It will load yoursite.com in 2 seconds.

   (ii) Applet is a
         (a) Static Web page   (b) Dynamic Web page
         (c) Active Web Page   (d) All of the above.

   (iii) Which of the following validation(s) should not be done using Javascript?
         (a) Age not more than 120 years   (b) Valid no. of digits in phone no field
         (c) Password   (d) Username.

   (iv) What is the effect of <h3 style="background-color:rgba(0,0,255,0.5)">I like HTML Tags</h3> in Browser?
         (a) Display the text with specified background color with half transparency
         (b) Display the text with specified background color with no transparency
         (c) Text will not be visible
         (d) None of them.

   (v)   Which of the following statement about XML is true?
         (a) XML tags are case sensitive   (b) Tags should be properly nested
         (c) XML should have a root element   (d) All of the above.

   (c) What is JSP actions? Give general syntax of defining action in JSP. Name some of the most widely used actions in JSP.

   (d) Explain the use of forward action in JSP with an example.

   (e) Say you have developed two JSP pages date.jsp and index.jsp. Write the syntax for inserting the date.jsp in index.jsp when use requests the index.jsp.

                              4 + 2 + (1 + 1) + 2 + 2 = 12

7. (a) What is the difference between Prepared and Callable statement?

   (b) Assume a table EMP [fields: ID, NAME, SALARY, AGE] in mySql in your localhost. Now do the following from your Java file:-
        (i)   Register the JDBC driver
        (ii) Open a connection
        (iii) Execute a query to find out the Employees above 40 years of age who get salary above Rs 10,000 per month
        (iv) Display the result
        (v)   Close the connection.

                              3 + (1 + 1 + 4 + 2 + 1) = 12

Group – E

8. (a) What is meant by a Spoofing attack?

   (b) Describe in brief the types of spoofing attack.

   (c) Consider the case of the SYN Flood attack and explain briefly the Denial of Service attack.

                              2 + 6 + 4 = 12

9. Write short notes on:-
   (i)   Trojan Horses
   (ii) Packet Filtering Firewall Example
   (iii) VPN.

                              (4 × 3) = 12