BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Revised)
Term-End Examination
June, 2022

BCS-053 : WEB PROGRAMMING

Time : 2 hours   *Maximum Marks : 50*

(Weightage : 75%)

*Note : Question no. **1** is **compulsory** and carries 20 marks. Attempt any **three** questions from the rest.*

1. (a) What are the features of Web 2·0 ? What technologies are used for developing Web 2·0 applications ?   *3*

    (b) What is a well-formed XML document ? Explain with the help of an example XML document.   *4*

    (c) The following information is to be input in a WAP application :

    > Name : [   ]
    > Age (in years) : [   ]

    Write the WML code for creating the above screen.   *3*

(d) List three characteristics that should be supported by server side scripting tools. *3*

(e) Write a JSP scriptlet that displays numbers 11 to 15 on the browser. You must use loop for this purpose. *3*

(f) Assuming that connection has been duly established with a database named student having table masterdata (enrolment, studentname, marks) and the information of a student has been put in the related form; write the code segment using JSP that will insert the student record (entered in the form) into the database. (You need not write statements for driver loading and connection establishment or closing the connection) *4*

2. (a) Explain the use of <div> and <span> tags, with the help of an example. *3*

(b) What is the need of class selector in CSS ? Explain with the help of an example. How is an id selector different from a class selector ? *4*

(c) Which tag will be used for the following tasks ? Give one example of the use of that tags : *3*

   (i) To input a large text in multiple lines.

   (ii) To define a footer in the web page.

   (iii) To input a password.

3. (a) Write a JavaScript code that can modify a paragraph displaying "Web Programing is Good" to "Learn Web Programming". *3*

(b) Explain the HTML DOM node tree, with the help of an example. *3*

(c) What is the purpose of using DTD in XML ? What are the limitations of DTD ? Give one difference between DTD and XML schema. *4*

4. (a) Explain the MVC architecture of Web development, with the help of a diagram. *5*

(b) What are JSP implicit objects ? Explain the purpose of the following implicit objects of JSP, with the help of an example : *5*
   (i) request
   (ii) response

5. (a) Differentiate between Session objects and Cookies. *3*

(b) Explain the purpose of session management, with the help of an example. *2*

(c) Which type of error is reported to browser as HTTP Status 500 ? Explain why such error can occur. *2*

(d) What is the need of JDBC ? Why can ODBC not be used in Java programs ? *3*

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