$\boxed{\textbf{BCS-053}}$

BACHELOR OF COMPUTER APPLICATIONS (BCA) (Revised)

Term-End Examination

June, 2021

BCS-053 : WEB PROGRAMMING

Time : 2 hours *Maximum Marks : 50*
(Weightage 75%)

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

1. (a) What is the purpose of < SELECT > element in HTML ? Explain how you will display the following list in HTML : *5*

<table>
<tr><td colspan="2">Select Highest Qualification</td></tr>
<tr><td>10th</td><td>▼</td></tr>
<tr><td>10th</td><td></td></tr>
<tr><td>10 + 2</td><td></td></tr>
<tr><td>Graduation</td><td></td></tr>
</table>

(b) What is more useful — Inline styles or Embedded style sheet ? Give reason in support of your answer. *2*

(c) Explain the how JavaScript can be used for modifying style of HTML element with the help of an example. *3*

(d) Explain the steps of JSP page processing with the help of a diagram. *5*

(e) Why does HTTP protocol need session management ? What is 'Session' and 'State' in this context ? Explain with the help of an example. *3*

(f) A variable 'i' is of integer type and name is an object of class string. Write the JSP code fragment that will declare 'i' and 'name' variables. *2*

2. (a) What is a Blog ? What does it contain ? What is a Microblog ? *3*

(b) What is the need of id selector in CSS ? Explain with the help of an example. *3*

(c) Write the HTML code that displays a paragraph "Welcome to Exam hall". Write a JavaScript code that changes this para to "Welcome to IGNOU" when the display of "Welcome to Exam hall" is clicked. You should use event handling for the same. *4*

3. (a) Create the following table using WML table element :

Book Title	Author Name
Computers Now	Desai
Web Programming	Tanenbaum

You need not display any title. *3*

(b) Represent the following information using an XML document. Write the DTD that validates the XML document created for : *4*

St_ID	Name	Programme
1001	Ravi	Bachelor of Computer Applications
1002	Ullman V	PhD

(c) What is WAP ? Why is WAP needed ? *3*

4. (a) Explain the three layer architecture of Web applications with the help of a diagram. *5*

(b) Write the scriptlet using JSP that prints a sequence of numbers from 1 to 5. Also find the sum of the sequence you must use for loop. *5*

5. (a) What is JSP Request Time Error ? How can these errors be handled ? *3*

(b) What is the role of DriverManager class ? Explain one of the important methods of this class. *3*

(c) Assume that a database contains a table Course (Course_ID, Name, Fee) and a connection to this database has been established. Write and explain JSP statements that will bring the details of courses in a ResultSet object. *4*

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