

No. of Printed Pages : 4

**BCS-053**

**BACHELOR OF COMPUTER  
APPLICATION (REVISED)  
(BCA)**

**Term-End Examination  
December, 2020**

**BCS-053 : WEB PROGRAMMING**

*Time : 2 Hours*

*Maximum Marks : 50*

*(Weightage : 75%)*

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

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1. (a) What is the purpose of a class selector in CSS ? Explain with the help of an example.

3

(b) Draw the HTML DOM Node tree for the following HTML fragment :

4

```
<html>
```

```
  <head>
```

```
    <title> Term-end Exam </title>
```

```
  </head>
```

```
  <body>
```

```
<h3> subject code </h3>
```

```
<p> BCS-053</p>
```

```
</body>
```

```
</html>
```

- (c) Explain the WML elements that will be required to display the following selection list : 3

```
O BCS-053
```

```
O BCS-054
```

```
O BCS-057
```

- (d) Write JSP scripting code that will display current date and time. 4
- (e) Explain the MVC architecture with the help of a diagram. 6
2. (a) What is Web 2.0 ? How is it different from Web 1.0 ? 3
- (b) What is Cascading Style Sheets ? Explain the format of CSS rules with the help of an example/diagram. 4
- (c) Explain the use of <div> and <span> tags with the help of an example. 3

3. (a) Create an XML document named Author. Every author should have a first name, last name and age field. Create records of two such authors. Also write the DTD that verifies the XML document of author. 5
- (b) Explain with the help of an example, how JavaScript can be used for modifying content of a paragraph. 5
4. (a) What are dynamic web pages ? Explain how JavaScript can be used to create dynamic web pages. 4
- (b) What the use of “POST” method of HTTP ? Explain with the help of an example. 3
- (c) Explain the *two* types of include used in JSP. 3
5. (a) Explain the JSP compilation time error with the help of an example. 3
- (b) What is a cookie ? Why are they used ? How can you create a new cookie in JSP ? Explain with the help of an example. 4

- (c) Consider that a database contains a student table having id, name and programme as its attributes. Assume that student table has 20 records and connection with database has been duly established, what will be the result of execution of the following statements of JSP ? 3

```
Statement stmt = con.createStatement ();
```

```
ResultSet rs = stmt.executeQuery (Select  
* from student);
```

(Please note : con is the name of connection object).