# BACHELOR OF COMPUTER APPLICATIONS (BCA) (Revised)

## Term-End Examination

## December, 2016

04605

### BCS-053 : WEB PROGRAMMING

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

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

1.  (a) What is Web 2·0 ? How is it different from Web 1·0 ? Explain any one Web 2·0 technology in brief.                     *4*

    (b) What is an event ? Explain with an example "how HTML DOM allows to assign events to HTML elements using JavaScript".                     *4*

    (c) Explain MVC architecture with the help of a diagram.                     *4*

(d) What is WML ? Explain any two WML elements that can be used for data input. *4*

(e) Explain how errors are handled at page level in jsp programming, with the help of a program fragment. *4*

2. (a) Design a web page using HTML and JavaScript containing a paragraph about computers. The text colour of this paragraph should change on click of the mouse on that paragraph. *5*

(b) Create an XML document that stores the title, author_name, year_of_publication and price of a book. Create this information for *three books*. Create the DTD that validates the XML document created for the books. *5*

3. (a) Explain the following in the context of jsp, with an example : *4*

(i) include directive

(ii) taglib directive

(b) Assume that on execution of a SQL web query about a student, 5 records (of the same student) are returned in the result set having the following fields :

student_id

course_code

marks_out_of_100

Write the appropriate jsp commands to display these records and the total marks of the student. *6*

4. (a) Write a jsp program fragment that sets up a session on receiving username and password. In case the username and password match "IGNOU" and "TEST" respectively, the user is redirected to a page named result.jsp. *5*

(b) What is AJAX ? How is it different from JavaScript ? Name any two web browsers that support AJAX. *5*

5. Explain any *four* of the following in context of web programming, with the help of an example/diagram. *10*

(a) Embedded style sheets

(b) Deployment descriptor and web.xml

(c) XML namespace

(d) GET method

(e) Use of < div > tag