No. of Printed Pages : 3

**BCS-053** 

# BACHELOR OF COMPUTER

#### **APPLICATION (REVISED)**

## (BCA)

#### **Term-End Examination**

### June, 2024

#### **BCS-053 : WEB PROGRAMMING**

*Time : 2 Hours* 

Maximum Marks : 50

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

- (a) Write a JSP program which will demonstrate the use of <jsp:forward> and <jsp:param> actions.
  - (b) What is safe method ? Is Get method a safe method ? Give reason in support of your answer.

- (c) Explain how errors are handled at application level in JSP programs, with the help of a program fragment.
- (d) Why do we need XML ? Write advantages of XML over HTML. 5
- (e) What is web container ? Name any *three* web containers.
- 2. (a) What are JSP Implicit objects ? Explain the use of any two implicit objects. 4
  - (b) Differentiate between the following : 6
    - (i) Static web pages and dynamic web pages.
    - (ii) 2-Tier architecture and 3-Tier architecture.
- 3. (a) Explain WML Navigation Elements with the help of WML programs. 5
  - (b) Write a HTML program using <details> and <summary> tag. Also explain both the tags. 5
- 4. Explain the following with the help of an example/diagram, if needed :  $4 \times 2\frac{1}{2} = 10$ 
  - (a) WAP protocol stack

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- (b) Deployment Descriptor
- (c) XML XSLT
- (d) JSP Scriptlets
- 5. (a) Explain the features of the following web technologies : 6
  - (i) Mashups
  - (ii) Rich Internet Applications
  - (iii) Web services
  - (b) Write a JSP program which may print the series of odd numbers from 1 to 100. Also find the sum of these numbers.