

Question Paper consists of FIVE units, each carrying 14 marks
 Each unit has TWO questions; either of them should be answered
 All parts of a question must be answered at one place.

UNIT-I

Marks

1. a) Explain the concept of Internet and describe various Internet protocols used in communication. 7M
- b) Discuss the structure of an HTML document with examples for forms, tables, and frames. 7M

(OR)

2. a) Explain the use of Cascading Style Sheets (CSS) in HTML with syntax and examples. 7M
- b) Discuss the role of Web Browser and Web Server in the client-server architecture of the Internet. 7M

UNIT-II

3. a) Explain the structure and syntax of XML with examples. 7M
- b) Discuss the purpose and importance of Document Type Definition (DTD) and XML Schema. 7M

(OR)

4. a) Explain the DOM and SAX parsers used for processing XML in Java. 7M
- b) Differentiate between XML and XHTML with suitable examples. 7M

UNIT-III

5. a) Describe the architecture and life cycle of a Java Servlet. 7M
- b) Explain how Servlets handle HTTP requests and responses using doGet () and do Post () methods. 7M

(OR)

6. a) Discuss the use of JDBC in connecting a Servlet to a database with a simple code example. 7M
- b) Explain session management using Cookies and HTTP Session in Servlets. 7M

UNIT-IV

7. a) Explain the anatomy of a JSP page and discuss the roles of declarations, directives, and expressions. 7M
- b) Describe how JavaBeans are used in JSP pages with an example. 7M

(OR)

8. a) Explain the role of JavaScript in client-side scripting with examples for event handling 7M
- b) Describe how form validation is performed using JavaScript and the Document Object Model (DOM). 7M

UNIT-V

9. a) Explain the key features of PHP and discuss how variables, arrays, and control structures are used. 7M
- b) Demonstrate PHP code to read form data (text boxes and radio buttons) and display results on a webpage. 7M

(OR)

10. a) Describe file handling operations in PHP, including reading and writing text files. 7M
- b) Explain how to connect PHP to a MySQL database, execute queries, and display results. 7M