

R22

Code No: 185EU

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, January - 2025

WEB PROGRAMMING

(Common to CSE(AI&ML), CSE(DS), AI&DS, AI&ML)

Time: 3 Hours

Max. Marks: 60

Note: This question paper contains two parts A and B.

i) Part- A for 10 marks, ii) Part - B for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of ten questions (numbered from 2 to 11) carrying 10 marks each. From each unit, there are two questions and the student should answer one of them. Hence, the student should answer five questions from Part-B.

PART - A

(10 Marks)

- 1.a) What are the differences between HTML4 and HTML5? [1]
- b) Explain the use of the <canvas> element in HTML5. [1]
- c) What are the features of Java? [1]
- d) Define inheritance and its types in Java. [1]
- e) What is JDBC, and why is it used? [1]
- f) How is a PreparedStatement different from a Statement in JDBC? [1]
- g) What are the lifecycle methods of an applet? [1]
- h) How can parameters be passed to an applet? [1]
- i) What is WSDL, and why is it important in web services? [1]
- j) Define UDDI and its role in web services. [1]

PART - B

(50 Marks)

- 2.a) Explain the structure and usage of HTML forms with examples.
 - b) Discuss the Browser Object Model (BOM) and its components. [5+5]
- OR**
- 3.a) How can CSS3 be used to enhance web page design? Provide examples.
 - b) Explain how events are handled in JavaScript with a detailed example. [5+5]
- 4.a) Explain the concept of object-oriented programming with Java as an example.
 - b) Write a program in Java to demonstrate the use of multithreading. [5+5]
- OR**
- 5.a) Discuss exception handling in Java with examples of try, catch, and finally blocks.
 - b) Explain the significance of packages in Java with examples. [5+5]

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- 6.a) Describe the process of establishing a database connection using JDBC with examples.
b) Write a Java program to perform CRUD (Create, Read, Update, Delete) operations on a database. [5+5]

OR

- 7.a) Explain the lifecycle of a JDBC connection and the steps involved in querying a database.
b) Discuss the role of TCP and UDP sockets in Java networking with examples. [5+5]

- 8.a) Explain the lifecycle of an applet with examples for each stage.
b) Write a program to add an image and sound to an applet. [5+5]

OR

- 9.a) Describe event handling in Java applets with an example program.
b) Explain the steps involved in handling HTTP requests and responses using servlets. [5+5]

- 10.a) Discuss the structure of an XML document with an example.
b) Explain how XML and XSLT can be used for data presentation with examples. [5+5]

OR

- 11.a) Write a program to parse an XML document using Java.
b) Explain the steps involved in creating and consuming a web service in Java. [5+5]

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