

UNIVERSITY OF MADRAS  
MASTER OF COMPUTER APPLICATIONS (MCA) DEGREE PROGRAMME  
SYLLABUS WITH EFFECT FROM 2023-2024

|                       |   |          |        |
|-----------------------|---|----------|--------|
| Title of the Paper    | <b>Web Technology and Advanced Java Programming lab</b> |          |        |
| Core–XII Practical -V | II Year & III Semester                                  | Credit:4 | 535C3D |

**COURSE OBJECTIVES:**

- To implement object oriented concepts in JAVA
- Develop the program using concepts Network programme
- Learn how to create a program in java beans.
- Learn how to connect relational database to Java
- Develop the program using concepts Applet

**List of Experiments:**

1. HTML programs
  - i. Demonstrate Lists.
  - ii. Demonstrate Hyperlinks.
  - iii. Navigation from one page to another.
  - iv. Navigation within the page.
  - v. Develop a static Home Page using frames.
  - vi. Develop a static Login Page.
  - vii. Develop a static Web Page for Shopping Cart.
2. Javascript programs
  - i. Validate USER LOGIN page.
  - ii. Validate REGISTRATION FORM
3. XML
  - i. Implement XML document for CUSTOMER DETAILS.
  - ii. Internal Document Type Definition to validate XML for Customer Details
  - iii. External Document Type Definition to validate XML for Customer Details
  - iv. XML for Person information and access the data using XSL.
  - v. To display contents of XML file in a table using Extensible StyleSheets.

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**4. Advanced Java**

- i. To invoke a servlet from HTML forms.
- ii. To invoke servlet from Applets.
- iii. Designing online applications with JSP
- iv. To invoke servlet from JSP.
- v. Creating JSP program using JavaBeans
- vi. Write a program to connect databases using JDBC.
- vii. Implementation of Java Beans.

**Course Outcomes**

On the successful completion of the course, students will be able to

|     |  |        |
|-----|--|--------|
| CO1 | Implement classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem. | K1-K2  |
| CO2 | Apply Applets and Swing programs.  | K3     |
| CO3 | Develop Servlets and JSP for creating Web based applications using JDBC.   | K4-K56 |

K1- Remember, K2- Understand, K3- Apply, K4- Analyze, K5 Evaluate, K6- Create

**Mapping with Programme Outcomes:**

|     | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | S   | S   | S   | -   | S   | -   | -   | -   | M   | -    |
| CO2 | S   | S   | S   | -   | S   | -   | -   | -   | M   | -    |
| CO3 | S   | S   | S   | -   | S   | -   | -   | -   | M   | S    |
| CO4 | S   | S   | S   | -   | S   | -   | -   | -   | M   | -    |
| CO5 | S   | S   | S   | -   | S   | -   | -   | -   | M   | S    |

S- Strong; M-Medium; L-Low