

MSI

CO Number	Course Outcome
CO1	Able to define [1. Remember] Web Development Strategies, Internet Tools and the protocols that govern the web, Internet Services & basic HTML tags.
CO2	Able to describe [2. Understand] web development strategies, architecture of the client-server computing, concepts of Java, Java Networking APIs, XML, Java Beans, JDBC, AJAX, Servlets and JSP.
CO3	Able to demonstrate [3. Apply] the concepts of Java Programming (Arrays, Methods & Classes, Inheritance, Polymorphism, Exceptions, Multithreading, File I/O, Applets, AWT and JDBC), HTML, CSS and JavaScript.
CO4	Able to examine [4. Analysis] the different kinds of architecture of web, XML Parsers, XML Structures, different types of CSS and various concepts of Java.
CO5	Able to compare [5. Evaluate] dynamic and client-side/server-side interactive web sites/applications and AWT applications on Applets and Frames as container.

Time: 3 Hrs.

M. M. 100

Section A

Q1. Attempt all questions:

(2X10 = 20 Marks)

- | | | |
|----|---|-----|
| a) | List different technologies used in web design and define the role of scripting language in web design. | CO1 |
| b) | Define client-server computing with diagram. | CO1 |
| c) | Describe the objective of any website. | CO2 |
| d) | Define static variable in java. | CO1 |
| e) | Write short notes on class and object. | CO1 |
| f) | Describe some important features of Java in brief. | CO2 |
| g) | Differentiate between XML and HTML. | CO2 |
| h) | Write short notes on interface. | CO2 |
| i) | Differentiate between encapsulation and abstraction. | CO2 |
| j) | Describe border layout and flow layout in brief. | CO2 |

Section B

Q2. Attempt all questions:

(10X3 = 30 Marks)

- | | | |
|-----------|---|-----|
| a) | Examine the concept of inheritance in java with suitable example. | CO4 |
| b) i) | Describe method overriding in java. Compare method overriding and method overloading with suitable example. | CO2 |
| OR | | |
| ii) | Describe Constructor and their type in java with suitable example. | CO2 |
| c) i) | Demonstrate through a JavaScript program to display the current day and time in the following format.
Today is: Monday.
Current time is : 11 AM : 50 : 58 | CO2 |

OR

- | | | |
|-----|--|-----|
| ii) | Illustrate TCP/IP client Socket and InetAddress class in Java Networking with example. | CO2 |
|-----|--|-----|

Section C

Q3. Attempt all questions:

(10X5 = 50 Marks)

- a i) Compare Java and Java Script. Write a java script program to find largest among five numbers. CO3

OR

- ii) Illustrate exception handling in java. Explain the keywords try, catch, throw and finally with example. CO3

- b i) Construct an HTML code to create a web-page that contains the user registration form with following details:
user name, user date of birth, user address, user gender, user email id, user mobile number. CO3

OR

- ii) Explain the working of AJAX along with its application. Mention suitable example. CO3

- c i) Describe JDBC. Explain the Drivers used in JDBC in brief. Write a java code to fetch and print the data from table. CO2

Table name: EMPLOYEE

Column Name: ID,EMP_NAME, EMP_DEPT, EMP_SAL

OR

- ii) Describe EJB and its Architecture. Differentiate between stateful and stateless EJB. CO2

- d i) Explain Cascading Style Sheet and their types with suitable example. CO4

OR

- ii) Explain Abstract class with suitable example. Distinguish between abstract class and concrete class. CO4

- e i) Explain the concept of Servlet. Compare the life cycle of Servlet is different from the life cycle of JSP with an example. CO5

OR

- ii) JSP is an extension of Servlet not replacement. Justify? Explain different type of standard action tags used in JSP. CO5