# APPLICABLE FROM A.S. 2020-21

Paper ID: 44620 L T/P C
Code:IT620 Paper: Front End Design Techniques 4 0 4

### **INSTRUCTIONS TO PAPER SETTERS:**

### **Maximum Marks: 75**

- 1. Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 25 marks.
- 2. Apart from Question No. 1, rest of the paper shall consist of four units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be 12.5 marks

## **Employability, Entrepreneurship & Skill Development**

#### **Course Outcomes:**

CO 1	Ability of students to understand the concepts of HTTP and HTML Language
CO 2	Ability of students to understand the concepts of XML and JavaBean
CO 3	Ability of students to understand the concepts of Servlet and JSP
CO 4	Ability of students to understand concept of JDBC

## **Course Outcomes -Program Outcomes Matrix**

Filled on a scale of 1 to 3 (3=High; 2=Moderate; 1=Low; '-'for no correlation)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	P10	P11	P12
CO 1	3	3	3	3	3	3	3	3	2	2	2	1
CO 2	3	3	3	3	2	2	3	2	1	1	1	1
CO 3	3	3	2	2	2	3	3	3	2	1	1	1
CO 4	3	3	2	3	2	2	3	2	1	1	1	1

## UNIT 1

History of the Internet and World Wide Web – HTTP, SMTP, MIME, HTML Common tags- List, Tables, images, forms, Frames; Cascading Style sheets, Introduction to Java Scripts, Objects in Java Script, Dynamic HTML with Java Script. Introduction to BootStrap and MEAN Stack

## UNIT 2

XML: Document type definition, XML Schemas, Document Object model, Presenting XML, Using XML Processors: DOM.

Java Beans: Introduction to Java Beans, Advantages of Java Beans, BDK , Introspection, Using Bound properties, Bean Info Interface, Java Beans API, Introduction to EJB's.

#### **UNIT 3**

Web Servers and Servlets: Tomcat web server, Introduction to Servlets: Lifecycle of a Servlets, The ServletsAPI, The javax.servelet Package, Reading Servelet parameters, Reading Initialization parameters. The javax.servelet HTTP package, Handling Http Request & Responses, Using Cookies-Session Tracking, Security Issues;

Introduction to JSP: The Anatomy of a JSP Page. JSP Application Design with MVC, JSP Application Development: Generating Dynamic Content, Using Scripting Elements Implicit JSP Objects, Conditional Processing Sharing Session.

## UNIT 4

Database Access: Database Programming using JDBC, Studying Javax.sql.\* package, Accessing a Database from a JSP Page, Application – Specific Database Actions, Statement and Prepared Statement Interface.

## **Text Books:**

- 1. Deitel&Deitel, Goldberg, "Internet and world wide web How to Program", 5<sup>th</sup> Edition, Pearson Education, 2011.
- 2. Patrick Carey, "New Perspectives on HTML, CSS, and XML, Comprehensive"., 4th Edition, PHI, ,2013
- 3. Hans Bergsten, "Java Server Pages", SPD O'Reilly, 2003.

### **References Books:**

- 1. Patrick Naughton and Herbert Schildt, "The 2 Complete Reference" Fifth Edition, TMH, 2002
- 2. Chris Bates, "Web Programming, building internet applications", 2nd edition, WILEY Dreamtech, 2006