United College of Engineering and Research

**Department of Information Technology**

**Lecture Plan**

|  |  |
| --- | --- |
| **Name of Course** | **Web Technology** |
| **AKTU Course Code** | **KCS-602** |
| **Branch** | **Computer Science and Engineering** |
| **Semester** | **VI** |
| **Section** |  |
| **Total Number of Students** |  |
| **Name of Faculty** | **Abhishek Kesharwani** |
| **Number of Lecture Proposed** | **47** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Unit No** | **Topic** | **CO** | **No of Lectures Required** | **No of Student present** | | **Actual Date of Completion** | **TLM** | **Signatu re of Incharg e** |
| 1 | 1 | Introduction and Web Development Strategies, History of Web and Internet | 1 | 1 |  | |  |  |  |
| 2 | Protocols governing Web, Writing Web Projects, Connecting to Internet | 1 |  | |  |  |  |
| 3 | Introduction to Internet services and tools, Introduction to client-server computing | 1 |  | |  |  |  |
| 4 | Core Java Introduction, Operator, Data type | 1 |  | |  |  |  |
| 5 | Variable, Arrays | 1 |  | |  |  |  |
| 6 | Methods & Classes | 1 |  | |  |  |  |
| 7 | Inheritance | 1 |  | |  |  |  |
| 8 | Package and Interface | 1 |  | |  |  |  |
| 9 | Exception Handling | 1 |  | |  |  |  |
| 10 | Multithread programming | 1 |  | |  |  |  |
| 11 | I/O, | 1 |  | |  |  |  |
| 12 | Java Applet | 1 |  | |  |  |  |
| 13 | String handling | 1 |  | |  |  |  |
| 14 | Introduction to AWT, AWT controls | 1 |  | |  |  |  |
| 15 | Layout managers, Event handling | 1 |  | |  |  |  |
| **No of Lectures Required to complete Unit 1** | | | | **15** |  | **No of Lectures Taken:** | | | |
| **16** | **2** | HTML: List | **2** | **1** |  | |  |  |  |
| **17** | Table | **1** |  | |  |  |  |
| **18** | Images | **1** |  | |  |  |  |
| **19** | Frames | **1** |  | |  |  |  |
| **20** | Forms | **1** |  | |  |  |  |
| **21** | CSS | **1** |  | |  |  |  |
| **22** | CSS | **1** |  | |  |  |  |
| **23** | XML | **1** |  | |  |  |  |
| **24** | DTD | **1** |  | |  |  |  |
| **25** | XML Schema, Object Models, Using XML Processors: DOM and SAX | **1** |  | |  |  |  |
| **26** | Presenting and using XML | **1** |  | |  |  |  |
| **27** | Dynamic HTML | **1** |  | |  |  |  |
| **No of Lectures Required to complete Unit 2** | | | | **12** |  | **No of Lectures Taken:** | | | |
| **28** | **3** | Introduction to JavaScript, Documents | **3** | **1** |  | |  |  |  |
| **29** | Forms, Statements | **1** |  | |  |  |  |
| **30** | Functions, Objects | **1** |  | |  |  |  |
| **31** | Introduction to AJAX | **1** |  | |  |  |  |
| **32** | Networking: Internet Addressing, InetAddress, Factory Methods, Instance Methods | **1** |  | |  |  |  |
| **33** | URL, URL Connection | **1** |  | |  |  |  |
| **34** | TCP/IP Client Socket, TCP/IP Server Socket, Datagram | **1** |  | |  |  |  |
|  | | | | **7** | **No of Lectures Taken:** | | | | |
| **35** | **4** | Enterprise Java Bean: Preparing a Class to  be a JavaBeans, Creating a JavaBeans  JavaBeans Properties, Types of beans, Stateful Session bean, Stateless Session bean, Entity bean. | **4** | **1** |  | |  |  |  |
| **36** | Merging Data from Multiple Tables: Joining, Manipulating | **1** |  | |  |  |  |
| **37** | Transaction Processing, Stored Procedures | **1** |  | |  |  |  |
| **38** | Databases with JDBC, | **1** |  | |  |  |  |
| **39** | Prepared Statements | **1** |  | |  |  |  |
| **No of Lectures Required to complete Unit 4** | | |  | **5** | **No of Lectures Taken:** | | | | |
| **40** | 5 | Servlets: Servlet Overview and Architecture, Interface Servlet and the Servlet Life Cycle |  | **1** |  | |  |  |  |
| **41** | Handling HTTP get Requests, Handling HTTP post Requests, Redirecting Requests to Another Page | **1** |  | |  |  |  |
| **42** | Session Tracking, Session Tracking with Http Session, Cookies | **1** |  | |  |  |  |
| **43** | Java Server Pages (JSP): Introduction, Java Server Pages Overview | **1** |  | |  |  |  |
| **44** | Scripting, Standard Actions, A First Java Server Page Example | **1** |  | |  |  |  |
| **45** | Implicit Objects | **1** |  | |  |  |  |
| **46** | Directives | **1** |  | |  |  |  |
| **47** | Custom Tag Libraries | **1** |  | |  |  |  |
|  | | |  | **8** | **No of Lectures Taken:** | | | | |

|  |  |
| --- | --- |
| **Teaching and Learning Methods** | |
| TLM1 | Chalk and Talk |
| TLM2 | PPT |
| TLM3 | Tutorial |
| TLM4 | Online |

|  |  |
| --- | --- |
| **Text Books & References** | |
| 1 | Burdman, Jessica, “Collaborative Web Development” Addison |
| 2 | Xavier, C, “ Web Technology and Design” , New Age International |
| 3 | Ivan Bayross,” HTML, DHTML, Java Script, Perl & CGI”, BPB Publication |
| 4 | Tanveer Alam, Internet & Java Programming, Khanna Publishing House Wesley |
| 5 | Bhave, “Programming with Java”, Pearson Education |
| 6 | Herbert Schieldt, “The Complete Reference:Java”, TMH. |
| 7 | Hans Bergsten, “Java Server Pages”, SPD O’Reilly |
| 8 | Margaret Levine Young, “The Complete Reference Internet”, TMH |
| 9 | Naughton, Schildt, “The Complete Reference JAVA2”, TMH |

|  |  |
| --- | --- |
| **Course Outcomes (COs)** | |
| At the end of this course students will demonstrate the ability to: | |
| **CO1** | To understand the basic concepts of Internet, protocols used and Java programming. |
| **CO2** | To develop static/dynamic web pages by the use of HTML, CSS, DHTML and XML. |
| **CO3** | To validate Forms using JavaScript and also able to create Client Server applications using Socket programming. |
| **CO4** | To establish connection between java programs and Database; also performs DML and DDL operations on database. |
| **CO5** | To develop dynamic web application (server-side scripting) using Servlet and JSP. |

Faculty Instructor Course Coordinator Lecture Plan Incharge Programme Coordinator Head of Department