**NATIONAL INSTITUTE OF TECHNOLOGY- WARANGAL**

**(An Institution of National Importance)**

**Department of Computer Science & Engineering**

**Academic Year: 2020-2021**

**MCA I – II Semester**

**Course Plan**

**FUNDAMENTALS OF WEB PROGRAMMING**

**(Code: CS5352) Credits: (4-0-0) 4**

**Syllabus:**

Web Essentials - Client-Server Architecture of Internet – File Transfer Protocol - HTTP, HTTPS - SMTP– POP3 - Client Side Programming -Creating Home Pages - Dynamic HTML - JavaScript - Cascading Style Sheets - Including Multimedia - Web Servers-Server side Programming- String Processing and Regular Expressions, Form Processing and Business Logic, Dynamic Content - Database Connectivity - Application Development

**Lecture Plan:**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Topics to be Covered** | **No. of Classes** |
| 1 | Introduction to Computers and Internet, Web Essentials - Client-Server Architecture of Internet – File Transfer Protocol - HTTP, HTTPS - SMTP– POP3 | 2 |
| 2 | Client Side Programming -Creating home pages- HTML Common Tags: List, Tables, images, forms, Frames. | 2 |
| 3 | Cascading Style sheets: Types of Style Sheets, Style Specifications and Formats. | 2 |
| 4 | Rule Cascading, Style Inheritance, Text Properties – Font families, Length Specifications in CSS, Font Properties, Line Boxes, Text Formatting and Color | 1 |
| 5 | Box Model – Basic Concepts And Properties, Box Model | 2 |
| 6 | JavaScript: Introduction to Java Scripts, Variables and Data Types | 1 |
| 7 | Conditional and Control Statements, Functions | 1 |
| 8 | Objects in Java Script | 2 |
| 9 | Dynamic HTML with Java Script, Event Handling. | 2 |
| 10 | Web Servers-HTTP Transactions, Multitier Architecture, Client –Side Scripting Versus Server-Side Scripting. | 2 |
| 11 | PHP: String Processing and Regular Expressions, Form Processing and Business Logic. | 3 |
| 12 | Form Processing and Business Logic. | 2 |
| 13 | Dynamic Content - Database Connectivity -Connecting to database (MySQL as reference) Executing simple queries, handling results, Handling sessions and cookies | 3 |
| 14 | **File Handling in PHP:** File operations like opening, closing, reading, writing, appending, deleting etc. on text and binary files, listing directories. | 2 |
| 15 | Introduction to Servlets: Lifecycle of a Servlet | 2 |
| 16 | Deploying a servlet, The Servlet API- The javax.servelet Package, The javax.servelet HTTP package | 2 |
| 17 | Reading Servlet parameters, Reading initialization parameters | 2 |
| 18 | Handling Http Request & Responses, Using Cookies-Session Tracking, Security Issues, | 2 |
| 19 | JDBC Connectivity: Introduction to JDBC, Database Programming using JDBC. | 2 |
| 20 | Studying Javax.sql.\* package, Accessing a Database from a JSP Page. | 2 |
| 21 | JSP and Web development: The anatomy of a JSP Page, | 2 |
| 22 | JSP Processing, Declarations, Directives, Expressions, Control Structures, Code Snippets, Implicit Objects | 2 |
| 23 | Using Beans in JSP Pages, Using Cookies and session for session tracking, connecting to database in JSP | 2 |
| **Total Number Of Classes** | | 45 |

**Reading:**

1. Deitel, Deitel & Nieto, Internet and Worldwide Web - How to Program, 5th Edition, PHI, 2011.

2. Bai and Ekedhi, "The Web Warrior Guide to Web Programming", 3rd Edition, Thomson, 2008.

3. Thomas A Powel, "Web Design: The Complete Reference", 2nd Edition, McGraw-Hill, 2002

**Theory Evaluation:**

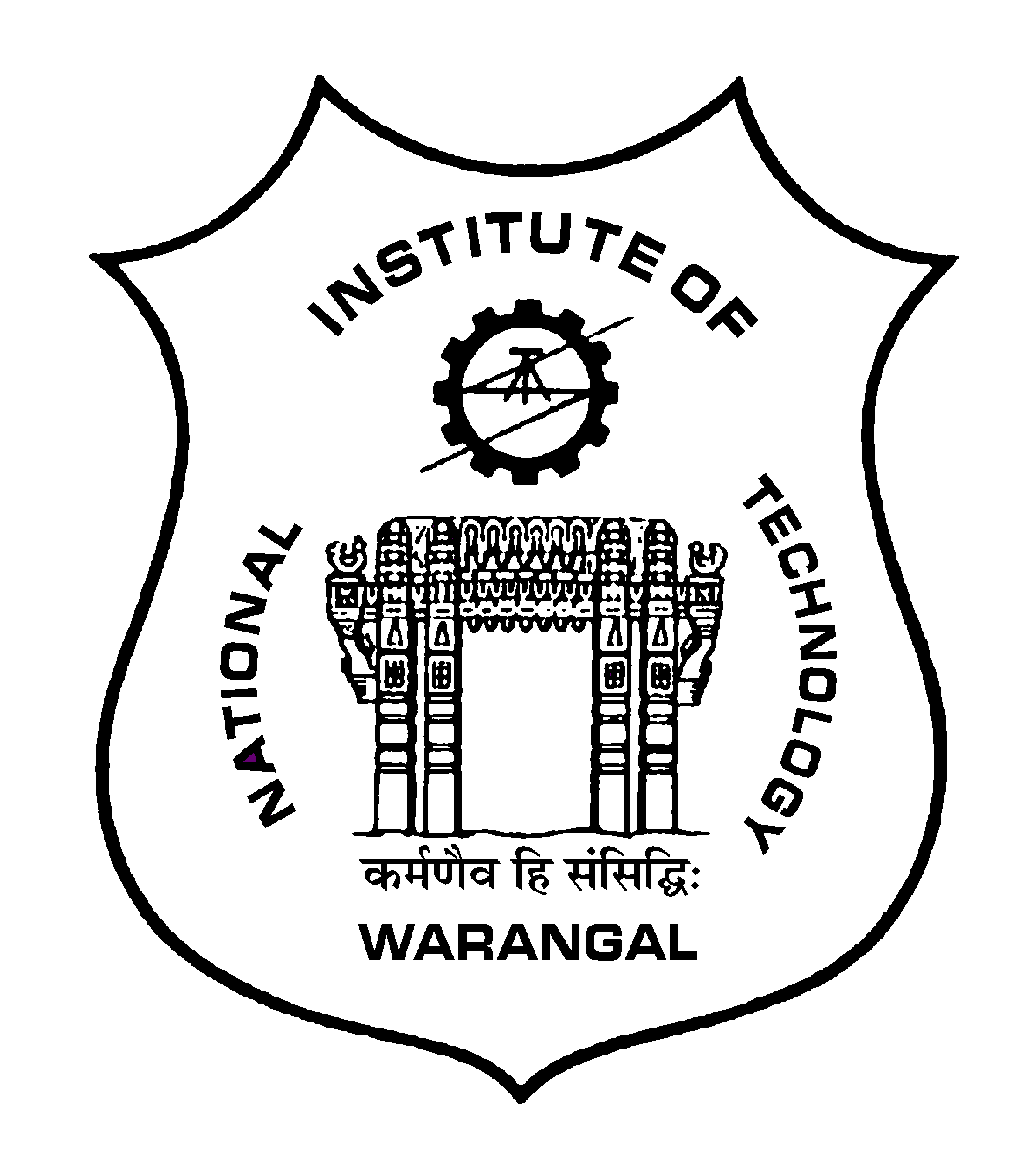
Minor-I Examination : 10 Marks

Minor-II Examination : 10 Marks

Mid-Examination : 30 Marks

External End Examination : 50 Marks

**Total Marks : 100 Marks**

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**WEB PROGRAMMING LAB**

**(Code: CS5356) Credits: (0-0-3)2**

**Syllabus:**

Creating home pages - Online shopping - Online examination - Chat system - Mailing system.

**Laboratory Evaluation:**

Mid- Examination : 30 Marks

Quiz Examination : 10 Marks

Continuous Evaluation : 20 Marks

(With Assignments)

End Examination : 60 Marks

**Total Marks : 100 Marks**