# SHRI GNANAMBICA DEGREE COLLEGE: MADANAPALLE



(AUTONOMOUS)

Course 8: Web Technologies (MAJOR)
SEMESTER III
(W.F. F. 2024-25)

(W.E.F.2024-25) Program: BSC (DS)



Hours per week: 4

Credits: 3

## **Course Objectives:**

This subject enables the student to create flexible, attractive, user- friendly web sites comprised of both static and dynamic web pages. Along with that students will also learn about interactions with web pages through JavaScript and host own web site on internet.

### **Course OUTCOMES:**

After Studying this subject, students would have capability to make their own web site and host on internet. Also, students would have enough knowledge about the technologies used in internet.

### Unit I

**HTML:** Basic HTML, Structure of an HTML document, Text formatting, Hyperlinks, Additional formatting tags, Lists, Tables, Images, Multimedia objects, Frames, Forms and Form Controls, HTML document heading details.

#### **Unit II**

Cascading Style Sheets (CSS): Introduction to CSS, Using styles, Simple examples, Creating your own styles, Properties and values in styles, Types of style sheets, Formatting blocks of information, Layers.

### **Unit III**

**Introduction to JavaScript and DHTML:** What is DHTML, DHTML components, JavaScript basics, Variables, String manipulation, Mathematical functions, Statements, Operators, Arrays, Functions.

#### **Unit IV**

**JavaScript Objects and DHTML Interaction:** Data and objects in JavaScript, Regular expressions, Exception handling, DHTML with JavaScript — Data validation, Opening a new window, Messages and confirmations.

#### Unit V

XML and Web Services: Defining data for web applications, Basic XML, Document Type Definition (DTD), Presenting XML, Document Object Model (DOM), Web Services.

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Shri Gnanambica Degree College (A)
MADANAPALLE # 517 325

## References:

Online references:

https://www.w3schools.com/web technologies

https://www.geeksforgeeks.org/web technologies/

https://www.tpointtech.com/web technologies-tutorial

# Reference Books:

- 1. Harvey M. Deitel and Paul J. Deitel, "Internet & World Wide Web How to Program", 4/e, Pearson Education.
- 2. Uttam Kumar Roy, Web Technologies from Oxford University Press Student Activities.



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# SHRI GNANAMBICA DEGREE COLLEGE: MADANAPALLE



(AUTONOMOUS)

Course 8: Web Technologies (MAJOR) - Practicals

SEMESTER III

(W.E.F.2024-25)

Program: BSC (DS)



Hours per week: 2

Credits: 1

## **List of Experiments**

- 1. Design web pages for your college containing a description of the courses, departments, faculties, library etc, use href, list tags.
- 2. Create your class timetable using table tag.
- 3. Create a feedback form for your curriculum. Use textbox, text area, checkbox, radio button etc.
- 4. Create a web page using frame. Divide the page into two parts with Navigation links on left hand side of page (width=20%) and content page on right hand side of page (width1. = 80%). On clicking the navigation Links corresponding content must be shown on the right hand side.
- 5. Write html code to develop a webpage having two frames that divide the webpage into two equal rows and then divide the row into equal columns fill each frame with a different background colour.
- 6. Create your resume using HTML tags. Experiment with colours, text, link, size and also other tags you studied.
- 7. Design a web page of your College Day Celebrations with an attractive background colour, textcolour, images, font etc. Use CSS.
- 8. Use Inline CSS to format your resume that you created.
- 9. Use External CSS to format your class timetable as you created.
- 10. Use External, Internal, and Inline CSS to format web page of your start up.
- 11. Develop a JavaScript to display your admission details in the college.
- 12. Develop simple calculator for addition, subtraction, multiplication and division operation using JavaScript.
- 13. Create HTML page with JavaScript which takes integer number as input and tells whether the number is odd or even.
- 14. Create HTML page that contains form for registration of your participation in a hackathon. Use relevant fields for input data. Write a JavaScript code to combine and display the input information when the button is clicked.
- 15. Create a login form with id and password. Perform input validation

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# SHRI GNANAMBICA DEGREE COLLEGE: MADANAPALLE

(AUTONOMOUS)

Course 8: Web Technologies (MAJOR)

**SEMESTER III** (W.E.F.2024-25)

Program: BSC (DS)

Question Paper – Blue Print

Time: 3 Hrs

Marks: 70

PART-A

Answer any 4 of the 8. Each Question Carries 5 marks.

 $(4 \times 5 = 20)$ 

1. Question

2. Question

3. Question

4. Question

5. Question

6. Question

7. Question

8. Question

**PART-B** 

Answer one from each unit. Each Question Carries 10 marks.

(5X10=50)

UNIT 1

9. Question

OR

10. Question

UNIT 2

11. Question

OR

12. Question

UNIT 3

13. Question

OR

14. Question

UNIT 4

15. Question

OR

16. Question

UNIT 5

17. Question

OR

18. Question

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