(An Autonomous College affiliated to Barkatullah University, Bhopal) (NAAC Accredited 'A' Grade)



# **SYLLABUS**

**SESSION-2022-23** 

UG I YEAR

SUBJECT: VOCATIONAL

Web Designing

Ahr Makhijani

(An Autonomous College Affiliated to Barkatullah University Bhopal) Department of Higher Education, Govt. of M.P.

Under Graduate Syllabus (Annual Pattern)

As recommended by Central Board of Studies and approved by the Governor of M. P.

wef 2021-2022 (Session 2022-23)

(NEP-2020)

Class / कक्षा

Year / वर्ष

Course Title / पाठ्यक्रम का शीर्षक

Course Type / पाठ्यक्रम का प्रकार

Credit Value/ क्रेडिट मान

Max. Mark/ अधिकतम अंक

UG

I Year

Web Designing

Vocational

Max. Marks: 100

Min. Marks: 35

### After studying this Course the student will be able to –

- Code a handful of useful HTML & CSSexamples
- Build semantic, HTML & CSS webpage
- Write basic scripts
- Use Names, Objects, and Methods
- Add Interactivity to a Web Page

Create Dynamic Web Pages using Java Script in HTML forms.

Expected Job Role / Career opportunities Job Role - Web Designer / Front End Developer/ Creative Ad Designer

Job Description – Web designers develop functional and appealing web pages, websites, web applications, online advertisements for individuals, businesses and government agencies to establish their online presence. They use knowledge of computer programming and graphic design to create websites that meet client needs.

#### Career Opportunities -

Typical employers of web designers are –

- 1. Software companies
- 2. IT consultancies
- 3. Specialist web design companies
- 4. Large corporate organisations
- 5. Any organisation that uses computer systems
- 6. Self-employment/freelance work is often possible for individuals with appropriate experience.
- 7. Vacancies are advertised online, by career services and by recruitment agencies.

Makhiyoni OMakhiyoni



### Particular

Unit-I	Introduction to Internet- World Wide Web, Internet Addressing, Browser, URL, Web server, website, homepage, Domain Name. Basic concepts.
	<b>Softwares for Web Designing</b> - Notepad/Notepad++, Dreamweaver, Blue Griffon, Net beans, Sea Monkey, Word press, Sublime.
	Introduction to HTML: HTML Tags and Attributes, HTML Basic Tags, Formatting Tags, HTML Color Coding, Div and Span Tags for Grouping.
	Lists: Unordered Lists, Ordered Lists, Definition list. Images: Image and Image Mapping
	<b>Hyperlink</b> : URL - Uniform Resource Locator, URL Encoding. Table: , , , , , <caption>, <thead>, , <tfoot>, <colgroup>, <col/>. Attributes Using Iframe as the Target</colgroup></tfoot></thead></caption>
	Form: <input/> , <textarea>, &lt;button&gt;, &lt;select&gt;, &lt;label&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Headers: Title, Base, Link, Styles, Script&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;HTML Meta Tag, XHTML, HTML Deprecated Tags &amp; Attributes&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Unit-II&lt;/td&gt;&lt;td&gt;CSS: Introduction, Features and benefits of CSS, CSS Syntax, External Style Sheet using &lt;link&gt;, Multiple Style Sheets, Value Lengths and Percentages.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;b&gt;Selectors&lt;/b&gt;: ID Selectors, Class Selectors, Grouping Selectors, Universal Selector, Descendant / Chil Selectors, Attribute Selectors, CSS – Pseudo Classes.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Color Background Cursor: background-image, background-repeat, background-position, CSS Cursor&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;b&gt;Text Fonts&lt;/b&gt;: color, background-color, text-decoration, text-align, vertical-align, text-indent, text-transform, white-space, letter-spacing, word-spacing, line-height, font-family, font-size, font-style, font-variant, font-weight.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Unit-III&lt;/td&gt;&lt;td&gt;&lt;b&gt;Lists Tables:&lt;/b&gt; list-style-type, list-style-position, list-style-image, list-style, CSS Tables (border, width &amp; height, text-align, vertical-align, padding, color)&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;POPPER OLI COLLEGE PROPERTY AND ADMINISTRATION OF THE PARTY AN&lt;/td&gt;&lt;td&gt;Box Model: Borders &amp; Outline, Margin &amp; Padding, Height and width, CSS Dimensions.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;b&gt;Display Positioning&lt;/b&gt;: CSS Visibility, CSS Display, CSS Scrollbars, CSS Positioning (Static Positioning, Fixed Positioning, Relative Positioning, Absolute Positioning), CSS Layers with Z-Index.&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</textarea>

Alle Charlingai

Floats: The float Property, The clear Property, The clearfix Hack.

Unit-IV

The JavaScript: Nature of JavaScript, Script Writing Basics, Enhancing HTML Documents with JavaScript, The Building Blocks.

Introduction to JavaScript, JavaScript Engines, Values, Variables and Operators, Variable Mutation Basic Operators, Operator Precedence, JavaScript Types, Types Definition, Types in JavaScript, Objects, Type Conversion and Coercion, Static vs Dynamic Type Checking.

JavaScript Conditionals: Introduction to Conditionals, Conditionals in JavaScript, Ternary Operators and Conditionals. Conditional Ladder & Switch statement.

JavaScript Arrays: Introduction to Arrays, Declaring and Mutating Arrays, Array Methods and Properties, Replication with Array Methods, Multi-dimensional Arrays.

Unit-V

JavaScript Loops: Introduction to Loops, Loops in JavaScript, While and Do/While Loops, For Loops, Break and Continue in Loops, Iterating Arrays, Iterating Objects.

JavaScript Functions: Introduction to Functions, Functions in JavaScript, Nested Functions in JavaScript, Arrow Functions in JavaScript, Function as an Argument, Function as the Returned

JavaScript Scope: Scope Introduction, Scope in JavaScript, Lexical Scope, Module Scope. Method of Adding Interactivity to a Web Page, Creating Dynamic Web Pages; Concept of Java Scripting the Forms.

Java Scripting the Forms, Basic Script Construction, Talking to the Form Objects, Organizing t Objects and Scripts, Field-Level Validation, Check Required Fields like Validating Zip Coc Automated Formatting, Format Phone, Format Money, Automatic Calculation, Calculate Expiration Date, Calculate Amount etc.

Unit-VI

Phases of Website Design and Development - Gathering information, Planning, Designing, Development, Testing, Website maintenance.

Basic Elements of good Web Design- Content, Usability, Aesthetics(solid layout, effective) typography, the right colour scheme, appropriate design elements), Visibility, Interaction.

Parameters for a good website design - website design goal, well designed and functional, simply content & easy to navigate, connectivity & compatibility, limit use of fonts, customize the content according to the target audience, fluidity in use across platforms, readily accessible contact and location, optimized for search and the social web.

Qualities of a good Web Designer - Great Communication, Creativity, Able to Meet Deadlines. Problem-Solving Skills, Passion, Self-Discipline, Software for Design, An Expansive Portfolio, Solid Design skills, self-learning, ability to work collaboratively, presentation skills.

Web Publishing-Web Hosting Basics, Types of Hosting Packages, Registering domains, Defining Name Servers, Using Cpanel, Creating Emails in Cpanel, Using FTP Client, Maintaining a Website.

Ande

CMakhijoni

#### **Suggestive Books:**

1	HTMLAnd CSS: Design And Build Websites, Wiley	Jon Duckett
2	Learning Web Design: A Beginner's Guide To HTML, CSS, JavaScript, And Web Graphics, O'reilly	Jennifer Niederst Robbins
3		Steven M. Schafer
4	Basics Of Web Design: Html5 & Css3, 5th Edition, Pearson Education, 2019.	Felke-Morris
5	Web Development & Design Foundations With Html5, 10th Edition, <i>Addison-Wesley</i> , 2020.	Felke-Morris
6	Richard York, Beginning CSS: Cascading Style Sheets For Web Design, Wiley India.	Ian Pouncey

### 2. Suggestive digital platforms web links:

- https://www.w3schools.com/
- https://spoken-tutorial.org/
- https://www.doc-developpement-durable.org/file/Projets-informatiques/cours-&-manuels-informatiques/htm-html-xml-ccs/Sams%20Teach%20Yourself%20HTML,%20CSS,%20and%20JavaScript%20All%20in%20Orpdf (PDF: 608 pages)
- <a href="http://www.nematrian.com/Pages/HTMLCSSJSCombined.pdf">http://www.nematrian.com/Pages/HTMLCSSJSCombined.pdf</a> (PDF: 514 pages)
- https://www.daoudisamir.com/references/vs\_ebooks/html5\_css3.pdf (PDF: 681 pages)

### Suggested equivalent online courses:

- <a href="https://nptel.ac.in/courses/106/105/106105084/">https://nptel.ac.in/courses/106/105/106105084/</a> (NPTEL Course: Internet Technology Part of the Course)
- <a href="https://onlinecourses.swayam2.ac.in/aic20\_sp11/preview">https://onlinecourses.swayam2.ac.in/aic20\_sp11/preview</a> (HTML and CSS)
- <a href="https://www.coursera.org/learn/html-css-javascript-for-web-developers#syllabus">https://www.coursera.org/learn/html-css-javascript-for-web-developers#syllabus</a> (HTML, CSS, and JavaScript for Web Developers)
- <a href="https://www.classcentral.com/course/html-css-javascript-for-web-developers-4270">https://www.classcentral.com/course/html-css-javascript-for-web-developers-4270</a>(HTML, CSS, and JavaScript for Web Developers)
- https://www.classcentral.com/course/duke-programming-web-4256
- <a href="https://www.coursera.org/learn/duke-programming-web">https://www.coursera.org/learn/duke-programming-web</a> (Programming Foundations with JavaScrip HTML and CSS)

Ande

Mathyani

### Suggested Continuous Evaluation Methods: Maximum Marks:100 Continuous Comprehensive Evaluation (CCE): 30 marks External Exam (EE) 70 Marks Class Text Assigment / Presentation Internal Assessment: आंतरिक मुल्यांकन क्लास टेस्ट असाइनमेंट / प्रस्तृतीकरण Total = 30Continuous Comprehensive Evaluation (CCE): 30 सतत व्यापक मूल्यांकन Section (A): Very Short Questions (50 word 05x02 = 10External Assessment: Each) अति लघू प्रश्न Section (B): Short Questions (200 word 04x05 = 20External Exam Section: 70 Each) लघु प्रश्न Time: 02.00 Hours 04x10 = 40Section (C): Long Questions (500 word Each ) दीर्घ उत्तरीय प्रश्न Total = 70

### Suggestive List of Practicals (HTML)

- 1. Design a home page which displays information about your college department using headings, HTML entitites and paragraphs.
- 2. Implement different type of list tags in the college department homepage.
- 3. Create a webpage for any clinic using marquee and HTML formatting tags.
- 4. Create 3 Hyperlinks in home page connecting it to 3 different pages.
- 5. Create 3 hyperlinks in a page, which jumps to 3 different headings on same page.
- 6. Insert image(s) and iframe in a webpage.
- 7. Design a page with image of block diagram of computer, mapping each component as area with specific co-ordinates which when clicked may give their detail.

Malchigane

- 8. Create a web page having two frames, Frame 1 containing links and another with contents of the link. When link is clicked appropriate contents should be displayed on Frame 2.
- 9. Design a timetable and display it in tabular format.
- 10. Demonstrate difference between "get" and "post" method of form tag in a form with name and password text fields.
- 11. Design an admission form for any course in your college with text, password fields, drop-down list, check-boxes, radio buttons, submit and reset button etc.
- 12. Create a website for online book store with Home, Login, Catalogue, Registration page with links to all these pages in a menu on top of every page. Embed heading, paragraph, images, video, iframe, form controls, table, list in this website.
- 13. Write a CSS style specification rule that would make all unordered lists ( tags) have square bullets and a purple background.

14. Create a HTML form with the use of cascading style sheets.

- 15. Design a web page of your Home town with a attractive background color, text color, an image, font face by using Inline CSS formatting.
- 16. Create a catalog for an online shopping company that sells music records using style sheets.
- 17. Create a sample code to illustrate the Inline style sheet for your web page.
- 18. Create a sample code to illustrate the External style sheet for your web page
- 19. Design a web page by using different CSS border styles.

20. Demonstrate the use of CSS Box Model.

21. Change the color of all elements with the class "colortext" to "Blue". Set different margins for all four sides of a paragraph.

### Suggestive List of Practicals (JavaScript)

1. Write a JavaScript program to display the current day and time.

2. Write a JavaScript program to remove a character at the specified position of a given string and return the new string.

3. Write a JavaScript program to get the current date.

4. Write a JavaScript program to find the area of a triangle.

5. Write a JavaScript program to determine whether a given year is a leap year.

- 6. Write a JavaScript program to calculate multiplication and division of two numbers.
- 7. Write a JavaScript program to convert temperatures to and from Celsius, Fahrenheit.
- 8. Write a JavaScript program to check whether a given positive number is a multiple of 3.
- 9. Write a JavaScript program to change the case of a string.(i.e upper case to lower case and vice-versa).

10. Write a JavaScript program to compute the sum of elements of given array of integers.

11. Develop and demonstrate a HTML file that includes JavaScript script for taking a number n as input using prompt and display first n Fibonacci numbers in a paragraph.

12. Develop and demonstrate a HTML file that includes JavaScript script for taking full name in a text field and display first, middle, last name in 3 different labels. Middle and last name may be optional, thus message like "NA" should be displayed in corresponding labels. If input contains 2 words, then they should be considered as first and last name.

13. Develop and demonstrate a HTML file that includes JavaScript script for switching an image source for a image on click of "change" and "original" button.

14. Design HTML form for keeping student record, apply JavaScript validation in it for restriction of mandatory fields, numeric field, email-address field, specific value in a field etc.

15. Write a JavaScript code that displays text "Bigger Text" with increasing font size in the interval of 10ms in red color, when the font size reaches 50pt it displays "Smaller Text" in green color. Then the font size should decrease to 5pt and then stop.

Mathija

Suggested Continuous Evaluation Methods:

	Maximum Marks :100	
Internal Assessment :	Class Interaction /Quiz	Total 30
	Attendance	
	Assignments (Charts/ Model	
	Seminar / Rural Service/	
	Technology Dissemination/	
	Report of Excursion/ Lab Visits/	
	Survey / Industrial visit)	
External Assessment :	Viva Voce on Practical	Total 70
	Practical Record File	
	Table work / Experiments	
	Any remarks/ suggestions:	

Mathijari

ales a

(An Autonomous College Affiliated to Barkatullah University Bhopal)
Department of Higher Education, Govt. of M.P.

Under Graduate Syllabus (Annual Pattern)

As recommended by Central Board of Studies and approved by the Governor of M. P.

wef 2021-2022 (Session 2022-23)

(NEP-2020)

Class / कक्षा Year / वर्ष

Course Title / पात्यक्रम का शीर्षक

BCA II Year

Data Communication and Computer Networks

Course Type / पाठ्यक्रम का प्रकार

Credit Value/ क्रेडिट मान

Max. Mark/ अधिकतम अंक

Core Course (Major – I)

Theory - 4 Credits

Practical - 2 Credits

 $3\overline{0} + 70$  (Minimum Marks 35)

Course Outcome:

- 1. Demonstrate the Basic Concepts of Networking, Networking Principles, Routing Algorithms. IP Addressing and Working of Networking Devices.
- 2. Demonstrate the Significance, Purpose and application of Networking protocols and Standards.
- 3. Describe, compare and contrast LAN, WAN, MAN, Intranet, Internet, AM, FM, PM and Various Switching Techniques.
- 4. Explain the working of Layers and apply the various protocols of OSI & TCP/IP model.
- 5. Analyze the Requirements for a Given Organizational Structure and Select the Most Appropriate Networking Architecture and Technologies.
- 6. Design the Network Diagram and Solve the Networking Problems of the Organizations with Consideration of Human and Environment. Install and Configure the Networking Devices.

Particular / विवरण

Network goals and application, Network structure, Network services, Example of network and Unit-I Network Standardization, Networking models: centralized, distributed and collaborative. Network Topologies: Bus, Star, Ring, Tree, Hybrid: Selection and Evaluation factors. Unit-II Theoretical Basis for Data communication, Transmission media, Twisted pair (UTP, STP), Coaxial Cable, Fiberoptics: Selection and Evaluation factors. Line of Sight Transmission, Communication Satellites. Analog and Digital transmission. Transmission and switching, frequency division and time division multiplexing, STDM, Circuit switching, packet switching and message switching. Brief Overview of LAN (Local Area Network): Classification. Brief overview of Wide Area Unit-III Network (WAN), Salient features and differences of LAN with emphasis on: Media. Topology. Speed of Transmission, Distance, Cost. Terminal Handling, Polling, Token passing. Contention. IEEE Standards: their need and developments. Unit-IV Open System: What is an Open System? Network Architectures, ISO-OSI Reference Model. Layers: Application. Presentation, Session, Transport, Network, Data Link & Physical Physical Layer Transmission, Bandwidth, Signaling devices used, media type. Data Link Layer: Addressing, Media

Andle Just ONakhijani

Access Methods, Logical link Control, Basic algorithms/ protocols.

Network Layer: Routing Fewest- Hops routing, Type of Service routing, Updating Gateway routing information. Brief overview of Gateways, Bridges and Routers, Gateway protocols, routing daemons. OSI and TCP/IP model. TCP/IP and Ethernet. The Internet: The structure of the Internet, the internet layers. Internetwork problems. Internet Standards.

Suggested Digital Platforms, Weblinks

https://www.nptel.ac.in/courses/106/105/106105082/https://cse.iitkgp.ac.in/~sandipc/courses/cs31006/slides/application\_layer.pdf

### Suggested Readings:

- 1. Tanenbaum, A.S.: Computer Networks, Prentice Hall, 1985 Processing, Prentice Hall, 1983.
- 2. Black: Computer Networks: Protocols, Standards and Interfaces, Prentice Hall International Tanenbaum, A.S.: Computer Networks, Prentice Hall, 1985. Processing, Prentice Hall, 1983.

#### Reference Books:

- 1. Comer D., "Computer Networks and Internet", 2<sup>nd</sup> Edition, Pearson Education
- 2. S.K. Basandra & S. Jaiswal, "Local Area Networks', Galgotia Publications

### Suggested Continuous Evaluation Methods:

Suggested Con	ntinuous Evaluation Methods: Maximum Marl	ks:100
Continuous Comprehens	ive Evaluation (CCE): 30 marks External Exam	m (EE) 70 Marks
Internal Assessment: आंतरिक मूल्यांकन	Class Text Assigment / Presentation क्लास टेस्ट असाइनमेंट / प्रस्तुतीकरण	Total = 30
Continuous Comprehensive		10141 50
Evaluation (CCE): 30 सतत		
व्यापक मूल्यांकन		
	Section (A)	
External Assessment:	(a) Objective types Questions (5 questions 1 mark each) वैकलपिक प्रश्न	05x01 = 05
External Exam Section: 70	(b) Very Short answer type Questions (50 word	05x01 = 05
Time: 02.00 Hours	Each) (5 questions 1 mark each) अति लघु प्रश्न	
	Section (B)	
	(a) Short answer type Questions (250 word Each)	$04 \times 06 = 24$
	4 to be attempted out of 7 given questions	
	(4 questions 6 mark each) लघु उत्तरीय प्रश्न	
	Section (C):	
	Long answer type Questions (500 word Each ) दीर्घ उत्तरीय प्रश्न	04x9 = 36
	(4 to be attempted out of 7 given questions)	Total = 70
	(4 questions 9 marks each)	

Ande ONathijoni

Note: - There was no practical prescribed by HED in the syllabus of this paper. Whole Bractical Paper is added under BOS, Dept of Comp. Science & Appl., SSSCW.

# Sri Sathya Sai College for Women, Bhopal

(An Autonomous College Affiliated to Barkatullah University Bhopal)

Department of Higher Education, Govt. of M.P.

Under Graduate Syllabus (Annual Pattern)

As recommended by Central Board of Studies and approved by the Governor of M. P.

wef 2021-2022 (Session 2022-23)

(NEP-2020)

Class / कक्षा Year / वर्ष

Course Title / पाठ्यक्रम का शीर्षक

Course Type / पाठ्यक्रम का प्रकार Credit Value/ क्रेडिट मान Max. Mark/ अधिकतम अंक

**BCA** II Year

Data Communication and Computer Networks Lab

Core Course (Major - I)

Practical - 2 Credits

30 Marks

(Minimum Marks - 10)

### Course Outcome:

After completing this lab course, students will be able to do :

- How data flows throughout a network
- How "connections" and "communications" are achieved in various network configurations
- How can develop an in-depth understanding of the functionality of the Internet and gain knowledge of data communications networking technologies.

### 1. Study of UTP network cable

- Study the color code of UTP cable
- Categories of UTP n/w cable
- Shielding of n/w cable
- Electricity interference with n/w cable
- Maximum length for which data cable can be used
- Crimping of RJ45 connector and Punching of data n/w cable
- Penta scanning of cabling work
- Rules of UTP laying

### 2. Study of Optical Fiber cable

- Different cores of OFC (6 core, 12, 24 core)
- Multimode & Single mode OFC cable
- Shielding of OFC
- Splicing/Termination of OFC
- OTDR Testing
- LIU fixing
- LIU management (pigtail/fiber patchcord)

Ed Mathyane

- Media Convertor
- SFP module
- Rules of OFC laying

#### 3. Use of tools

- Crimping Tool
- Punching Tool
- Nose plier
- Wire Stripping and Cable Cutter
- Multimeter
- RJ45 RJ12 Cat5 Cat6 Network Cable Tester
- In-Line Coupler (RJ45 F/F)
- RJ45 NETWORK SPLITTER ADAPTER 2-way

### 4. Configuration/ Management of Local Area Network

- Implementation of file and printer sharing.
- Installation of ftp server and client.
- Connect the computers in local Area Network.
- Configuring Class A IP Address on LAN Connection in Computer LAB and then use following tools: Ping, ipconfig, getmac, hostname, nslookup, tracert, arp, pathping. systeminfo.

### 5. Configure static routing using packet tracer

- Implementation of Subnetting in Class A, B and C
- Ping between 2 systems using IPv6
- Configuration of NAT for incoming packet request
- Configuration of Software / Hardware firewall to block outgoing requests to facebook.com

HWW. OMaklujani

(An Autonomous College affiliated to Barkatullah University, Bhopal)
(NAAC Accredited 'A' Grade)



# **SYLLABUS**

**SESSION-2022-23** 

UG II YEAR

SUBJECT: VOCATIONAL

Web Development using PHP & MySQL

Ahre Makhijani

(An Autonomous College Affiliated to Barkatullah University Bhopal)
Department of Higher Education, Govt. of M.P.

Under Graduate Syllabus (Annual Pattern)

As recommended by Central Board of Studies and approved by the Governor of M. P.

wef 202**1**-2023 (Session **2022-23**)

(NEP-2020)

Class / कक्षा

Year / वर्ष

Course Title / पाठ्यक्रम का शीर्षक

Course Type / पाठ्यक्रम का प्रकार

Credit Value/ क्रेडिट मान

Max. Mark/ अधिकतम अंक

UG

II Year

Web Development using PHP & MySQL

Vocational

4

Max. Marks: 70+30

Min. Marks: 35

### Course Learning Outcomes(CLO)

### After completion of course, students will be able to -

• Discover how the web works, what makes web sites work.

- Implement simple and impressive design techniques, from basics to advanced so as to focus on oriented and user centric designs.
- Use Server Side Scripting.
- Implement concept of data persistence.
- Apply skills to program logic using PHP and handle data using MySQL.
- Develop dynamic websites using PHP & MySQL.

### Expected Job Role / career opportunities

Job Role - Web Designer / Front End & Back End Developer/ Creative Ad Designer

**Job Description** – PHP developers write server-side web applications using Hypertext Preprocessor (PHP) scripting languages. They are tasked with developing and coding back-end components and connecting applications to other web services. PHP developers also assist frontend developers to ensure their work integrates into the application.

### Career Opportunities -

Typical employers of web developers and designers are -

- Software companies
- IT consultancies
- Specialist web design companies
- Large corporate organisations
- Any organisation that uses computer systems
- Self-employment/freelance work is often possible for individuals with appropriate experience.

Vacancies are advertised online, by career services and by recruitment agencies.

Ahdz one Onothijani

### Particular

Unit-I	BASICS OF PHP: Introduction to PHP, PHP features, installation of XAMPP/WAMP, Benefits of using PHP MYSQL, Server Client Environment, Web Browser, Web Server
	Installation & Configuration Files.
	OOPs with PHP, language basics, syntax, comments, variables, constants and data types, expressions and operators, flow control statements, looping structures, Arrays
	Including html code in PHP, Embedding PHP in web pages.
Unit-II	<u> </u>
	FUNCTIONS & STRINGS in PHP: Defining a function, Calling a function, variable scope,
	function parameters, return values, User Defined Function, System Defined Function,
	Parameterized Function, Date & Time Function, Hash Function, Mail Function, predefined functions.
	Strings: Creating & accessing string, searching and replacing strings, encoding and escaping,
	comparing strings, formatting strings, regular expression.
Unit-III	Data & File Handling: PHP Forms: \$ GET, \$ POST, \$ REQUEST, \$_FILES, \$_SERVER,
	\$GLOBALS, \$ ENV, input/output controls, validation, Cookies and Sessions.
	File Handling: File and directory, open, close, read, write, append, delete, uploading and
	downloading files. File exists, File Size, Rename. Reading and display all/selected files present in a
	directory.
Unit-IV	MySQL an Overview: Introduction, What is a Database, Understanding an RDBMS, Tables,
	Record & Fields, SQL Language.
	Working with phpmyadmin: Creating and using a database, Selecting a database.
	creating/dropping a table, loading data into a table, Retrieving information from a table, selecting all
	data, selecting particular rows, selecting particular columns, writing queries, sorting, date,
	calculations, working with NULL values, pattern matching, counting rows, using more than one
	tables, using table and column aliases.
Unit-V	MySQL DATABASES IN PHP: Introduction, connecting to a MySQL database, querying the
	database, Retrieving and displaying the results, modifying data and deleting data through front end.
***	Designing applications using PHP & MySQL.
Unit-VI	Building a Content Management System(CMS): Blueprinting the application, Building the CMS
	database, Establishing your work area, Creating and styling the first page, Making page assets
	reusable, Connecting the application to the database.

Suggestion Books:-

	Suggestion books		
1	Head First PHP & MySQL,	Lynn Beighley & Michael	
		Morrison, O'Reilly	
2	PHP: A Beginner's Guide,	Vikram Vaswani	McGraw-Hill Edition
3	Learning PHP, MySQL, JavaScript, &	Robin Nixon, O'Reilly	
	CSS: A Step-by-Step Guide to Creating		
	Dynamic Websites,		
	PHP and MySQL Web Development,	Luke Welling, Addison-Wesley	i i
4			
5	The Joy of PHP	Alan Forbes	BeakCheck LLC

Afrila Jung

Marchegani



### Suggested equivalent online courses: e-reading:

- 1. https://onlinecourses.swayam2.ac.in/aic20\_sp32/preview
- 2. https://www.udemy.com/course/php-mysql-tutorial/
- 3. https://www.udemy.com/course/php-mysql-course-for-absolute-beginners/
- 4. https://www.simplilearn.com/learn-php-basics-free-course-skillup
- 5. <a href="https://www.coursera.org/learn/web-applications-php">https://www.coursera.org/learn/web-applications-php</a>

### Scheme of Marks for Vocational

Suggested Cunti	nuous Evaluation Methods: Maximum Marks:	100
Continuous Comprehensive	e Evaluation (CCE): 30 marks External Exam	(EE) 70 Marks
Internal Assessment: आंतरिक मूल्यांकन	Class Text Assigment / Presentation	
	क्लास टेस्ट असाइनमेंट / प्रस्तुतीकरण	Total = 30
Continuous Comprehensive		
Evaluation (CCE): 30 सतत		
व्यापक मूल्याकन		
External Assessment:	Section (A): Very Short Questions (50 word Each) अति लघु प्र	05x02 = 10
External Exam Section: 70	Section (B): Short Questions (200 word Each) लघु प्र	04x05 = 20
Time: 02.00 Hours		
	Section (C): Long Questions (500 word Each ) दीर्घ उत्तरीय प्र	04x10 = 40
		Total = 70

And Jag

Makhigane Makhigane



#### Practical

- 1. Create a simple HTML form and accept the user name and display the name through PHP echo statement.
- 2. Write a PHP script to demonstrate arithmetic operators, comparison operator, and logical operator.
- 3. Write PHP Script to input marks, generate result and display grade.
- 4. Write PHP Script for addition of two 2x2 matrices.
- 5. Write PHP script to obtain factorial of a number using function
- 6. Write PHP script to demonstrate string, date and math function.
- 7. Create student registration form using text box, check box, radio button, select, submit button. And display user inserted value in new PHP page.
- 8. Write two different PHP script to demonstrate passing variables through a URL.
- 9. Write two different PHP script to demonstrate passing variables with sessions.
- 10. Write PHP script to demonstrate passing variables with cookies.
- 11. Write a program to keep track of how many times a visitor has loaded the page.
- 12. Write PHP script to demonstrate exceptional handling.
- 13. Write a PHP script to connect MySQL server from your website.
- 14. Create EMP table with emp\_no, emp\_name, designation and salary. Write a program to read employee information from EMP table and display all this information in php page.
- 15. Create customer table in mysql with cust\_no, cust\_name, item\_purchased, and mob\_no, insert 10 records into it.
- 16. Write a program to read customer information from customer table and display all these information in table format on php page.
- 17. Deign a web form in php to input values for the customer record and insert the record in customer table as a tuple.
- 18. Design an "update" web form to edit name of customer to "Bob" with cust\_no =1
- 19. Design an "delete" web form to delete record with cust\_no=3.
- 20. Create a dynamic web site using PHP and MySQL.

Afile Joseph

Mathyone

Suggested Continuous Evaluation Methods:

Maximum Marks :100	
Class Interaction /Quiz	Total 30
Attendance	
Assignments (Charts/ Model	
Seminar / Rural Service/	
Technology Dissemination/	
Report of Excursion/ Lab Visits/	
Survey / Industrial visit)	
Viva Voce on Practical	Total 70
Practical Record File	
Table work / Experiments	
Any remarks/ suggestions:	
	Class Interaction /Quiz  Attendance  Assignments (Charts/ Model Seminar / Rural Service/ Technology Dissemination/ Report of Excursion/ Lab Visits/ Survey / Industrial visit)  Viva Voce on Practical  Practical Record File  Table work / Experiments

Malchijane