

## B. VOC IN E-COMMERCE & DIGITAL MARKETING

### FIRST DRAFT OF COURSE STRUCTURE AND SYLLABUS

#### SECOND YEAR

Semester-III		Semester-IV	
Subject Code	Name of the Subject	Subject Code	Name of the Subject
<b>General Component</b>			
<b>ECDM301</b>	Principles of Management	<b>ECDM401</b>	Social Media Marketing-I
<b>ECDM302</b>	Marketing Management	<b>ECDM402</b>	Services Marketing
<b>ECDM303</b>	Web designing using PHP	<b>ECDM403</b>	Search Engine Optimization & SMM
<b>Skill Component</b>			
<b>ECDM304</b>	Digital Marketing Overview	<b>ECDM404</b>	Business Management
<b>ECDM305</b>	Programming lab on PHP	<b>ECDM405</b>	Google Adwards & Google Analytics
<b>ECDM306</b>	Management Information System and Case studies.	<b>ECDM406</b>	WordPress framework

## **Paper 1: PRINCIPLES OF MANAGEMENT [Course Code -: ECDM301]**

**Duration: 03 hrs.    Marks: 100    Lectures: 48    Credits: Theory 12+ Practical 18  
(Total: 30)**

### **Course Objectives:**

1. To introduce students to the fundamental concepts, theories, and principles of management.
2. To develop students' understanding of various management functions, including planning, organizing, leading, and controlling.
3. To enhance students' decision-making and problem-solving skills in a management context.
4. To expose students to different organizational structures, cultures, and environments.
5. To foster students' understanding of the ethical and social responsibilities associated with management.
6. To cultivate students' ability to work effectively in teams and to communicate and interact with others in a managerial role.
7. To encourage critical thinking and analysis of real-world management scenarios.

### **Course Outcomes:**

- CO1. Develop an understanding of the fundamental concepts, theories, and principles of management.
- CO2. Demonstrate proficiency in the various management functions, including planning, organizing, leading, and controlling.
- CO3. Apply decision-making and problem-solving skills in a management context.
- CO4. Analyze and evaluate different organizational structures, cultures, and environments.
- CO5. Recognize and address ethical and social responsibilities associated with management.
- CO6. Demonstrate effective teamwork and interpersonal communication skills in a managerial role.
- CO7. Analyze and critically evaluate real-world management scenarios.

## CONTENT OF SYLLABUS

UNIT	TOPIC	No. of Lectures
<b>1</b>	<p><b>Unit 1 Nature of Management</b></p> <p>Meaning, Definition, Nature, Importance &amp; Functions</p> <p>Management an Art, Science &amp; Profession-Management as social System, Concept of Management-Administration-Organization, Universality of management.</p>	12
<b>2</b>	<p><b>Unit 2 Evolution of management Thoughts</b></p> <p>Contribution of F.W.Taylor, Henri Fayol, Elton Mayo, Chester Barnard &amp; Peter Drucker to the management thought</p> <p>Various approaches to management (i.e. School of management thought) Indian management Thought</p>	12
<b>3</b>	<p><b>Unit 3 Functions of Management: Part – I</b></p> <p>Planning –Meaning –Need &amp; Importance, types levels – advantages &amp; limitations; Forecasting- Need &amp; Techniques; Decision making – Types - Process of rational decision making &amp; techniques of decision making.</p> <p>Organizing – Elements of organizing &amp; process Types of organizations, Delegation of authority – Need, difficulties in delegation – Decentralization.</p> <p>Staffing – Meaning &amp; importance</p>	12
<b>4</b>	<p><b>Unit 4 Functions of Management : Part –II</b></p> <p>Direction - Nature – Principles of Communication – Types &amp; Importance Motivation - Importance – Theories Leadership – Meaning - Styles, qualities &amp; functions of leaders</p> <p>Controlling – Need, nature, Importance, Process &amp; techniques</p> <p>Co-ordination - Need – Importance</p>	12
		<b>48</b>

**Practical (Based on the above Units):**

Practical based on the above units

**Recommended Books:**

1. Essential of Management - Harold Koontz and Itinz Wiebritch- McGraw-Hill International
2. Management Theory & Practice – J.N. Chandan
3. Essential of Business Administration – K. Aswathapa, Himalaya Publishing House
4. Principles & Practice of management – Dr. L.M. Prasad, Sultan Chand & Sons – New Delhi
5. Business Organization & management – Dr. Y.K. Bhushan.
6. Management: Concept and Strategies by J.S. Chandan, Vikas Publishing.
7. Principles of Management, By Tripathi, Reddy Tata McGraw Hill
8. Business organization and management by Talloo by Tata Mc Graw Hill

***Mapping of Program Outcomes with Course Outcomes***

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3				3		1
CO2	2	3					
CO3	1	2	3			2	
CO4			2	1			
CO5			1		2		
CO6							
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

**Justification for the mapping****PO 1 Disciplinary Knowledge**

CO1. Develop an understanding of the fundamental concepts, theories, and principles of management.

CO2. Demonstrate proficiency in the various management functions, including planning, organizing, leading, and controlling.

CO3. Apply decision-making and problem-solving skills in a management context.

### **PO 2 Critical Thinking and Problem solving**

CO2. Demonstrate proficiency in the various management functions, including planning, organizing, leading, and controlling.

CO3. Apply decision-making and problem-solving skills in a management context.

### **PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO3. Apply decision-making and problem-solving skills in a management context.

CO4. Analyze and evaluate different organizational structures, cultures, and environments.

CO5. Recognize and address ethical and social responsibilities associated with management.

### **PO 4 Research-Related Skills**

CO4. Analyze and evaluate different organizational structures, cultures, and environments.

### **PO 5 Personal and Professional competence**

CO1. Develop an understanding of the fundamental concepts, theories, and principles of management.

### **PO 6 Effective Citizenship and Ethics**

CO3. Apply decision-making and problem-solving skills in a management context.

### **PO 7 Environment and Sustainability**

CO1. Develop an understanding of the fundamental concepts, theories, and principles of management.

## **Paper 2: MARKETING MANAGEMENT [Course Code -: ECDM302]**

**Duration: 03 hrs.    Marks: 100    Lectures: 48    Credits: Theory 12+ Practical 18  
(Total: 30)**

### **Course Objectives:**

- 1 To introduce the concept of Marketing Mix as a framework for Marketing Decision making.
- 2 To emphasize the need, importance and process of Marketing Planning and Control.
- 3 To sensitize the students to the dynamic nature of Marketing Function.
4. To provide students with a comprehensive understanding of marketing concepts, theories, and principles.
5. To develop students' knowledge and skills in the application of marketing strategies and tactics.
6. To enhance students' ability to analyze market trends and make informed marketing decisions.
7. To promote critical thinking and problem-solving skills through case studies and real-world marketing scenarios.

### **Course Outcomes:**

- CO1. Understand the fundamental concepts and theories of marketing management.
- CO2. Analyze market trends and consumer behavior to identify target markets and market segments.
- CO3. Develop marketing strategies and tactics that align with business objectives and target markets.
- CO4. Apply marketing research techniques to gather data and make informed marketing decisions.
- CO5. Create and implement marketing plans and campaigns that effectively reach target audiences.

CO6. Evaluate the effectiveness of marketing initiatives and make adjustments to optimize results.

CO7. Demonstrate effective communication skills in presenting marketing strategies and plans.

### CONTENT OF SYLLABUS

UNIT	TOPIC	No. of Lectures
<b>1</b>	<p><b>1 New Product Development &amp; Product Life Cycle:</b></p> <p>New Product Development :Need for new product development, New Product Development Process: Idea Generation to commercialization.</p> <p>Branding: Introduction to Branding, Product Vs. Brand, Meaning of a brand, brand equity &amp; brand elements.</p> <p>Packaging &amp; Labeling: Meaning &amp; role of Packaging &amp; Labeling, Primary, Secondary &amp; Shipment packages</p> <p>Product Life Cycle: Concept &amp; characteristics of Product Life Cycle,</p>	12
<b>2</b>	<p><b>2 Price:</b></p> <p>Pricing Basics: Meaning, Importance and Factors influencing pricing decisions</p> <p>Setting the Price: Setting pricing objectives, Determining demand, Estimating costs, Analyzing competitors' pricing, Selecting pricing method, Selecting final price.</p> <p>Adapting the Price: Geographical pricing, Price discounts &amp; allowances, Promotional pricing, Differentiated pricing,</p>	12
<b>3</b>	<p><b>3 Place:</b></p> <p>The Role of Marketing Channels: Channel functions &amp; flows, channel.</p> <p>Channel Design Decisions: Analyzing customers' desired service output levels,</p> <p>Channel Options: Introduction to Wholesaling, Retailing,</p>	12

	Franchising, Direct marketing , Market Logistics Decisions: Order processing, Warehousing, Inventory, and Transportation.	
<b>4</b>	<b>4 Promotion:</b> Introduction: The role of marketing communications in marketing effort. Communication Mix Elements: Introduction to Advertising, Sales Promotion, Personal Selling, Public Relations, Direct Marketing. Concept of Integrated Marketing Communications (IMC) Developing Effective Communication: Identifying target audience, determining communication objectives, designing the communications, selecting communication channels Deciding Marketing Communications Mix: Factors in setting marketing communication mix, measuring communication results	12
		<b>48</b>

**Practical (Based on the above Units):**

Practical based on the above units

**Recommended Books:**

**1 Text Books**

1. Marketing Management by Philip Kotler, Kevin Lane Keller, Abraham Koshy, Mithileshwar Jha, Pearson , 13thEdition
2. Marketing Management by Rajan Saxena, TMGH, 4th Edition
3. Marketing Management by Dr D B Bharati & Rohan Dahivale

**2 Reference Books**

4. MKTG- CENGAGE Learning- Lamb/Hair/Sharma

5. Principles of Marketing by Philip Kotler, Gary Armstrong, Prafulla Agnihotri, Ehasan Haque, Pearson, 13th Edition

6. Marketing Management- Text and Cases, Tapan K Panda, 2nd Edition, Excel Books

7. Marketing Management by Ramaswamy & Namakumari, Macmillan, 4 th Edition.

***Mapping of Program Outcomes with Course Outcomes***

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3					3	
CO2	1	3	2				
CO3			3				
CO4							
CO5				2	1		3
CO6							
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

**Justification for the mapping**

**PO 1 Disciplinary Knowledge**

CO1. Understand the fundamental concepts and theories of marketing management.

CO2. Analyze market trends and consumer behavior to identify target markets and market segments.

**PO 2 Critical Thinking and Problem solving**

CO2. Analyze market trends and consumer behavior to identify target markets and market segments.

**PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO2. Analyze market trends and consumer behavior to identify target markets and market segments.

CO3. Develop marketing strategies and tactics that align with business objectives and target markets.

#### **PO 4 Research-Related Skills**

CO5. Create and implement marketing plans and campaigns that effectively reach target audiences.

#### **PO 5 Personal and Professional competence**

CO5. Create and implement marketing plans and campaigns that effectively reach target audiences.

#### **PO 6 Effective Citizenship and Ethics**

CO1. Understand the fundamental concepts and theories of marketing management.

#### **PO 7 Environment and Sustainability**

CO5. Create and implement marketing plans and campaigns that effectively reach target audiences.

## **Paper 3: Web designing using PHP[Course Code -: ECDM303]**

**Duration: 03 hrs.    Marks: 100    Lectures: 48    Credits: Theory 12+ Practical 18  
(Total: 30)**

### **Course Objectives:**

1. Understand the basics of web designing using PHP, including HTML, CSS, and JavaScript integration.
2. Learn the fundamentals of PHP programming, such as variables, data types, operators, control structures, functions, and arrays.
3. Gain knowledge of database integration with PHP, including connecting to a database, executing SQL queries, and handling data retrieval and storage.
4. Develop skills in creating dynamic web pages and implementing user interaction using PHP.
5. Learn how to work with PHP frameworks and libraries to enhance web development efficiency and functionality.
6. Understand the principles of responsive web design and create websites that are mobile-friendly and compatible with different devices and screen sizes.
7. Develop problem-solving skills and learn how to identify and debug common errors and issues in web designing using PHP.

### **Course Outcomes:**

- CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.
- CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.
- CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.
- CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.
- CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.
- CO6. Students will be able to create mobile-friendly websites and ensure compatibility across different devices and screen sizes.

CO7. Students will be able to apply problem-solving skills to design and develop efficient and effective web solutions using PHP.

### CONTENT OF SYLLABUS

UNIT	TOPIC	No. of Lectures
1	<p><b>Introduction to web:</b> HTTP basics, Introduction to Web server and Web browser: Introduction to PHP, What does PHP do?, Lexical structure , Language basics, Function and String: Defining and calling a function , Default parameters , Variable parameters, Missing parameters , Variable function, Anonymous function , Types of strings in PHP , Printing functions , Encoding and escaping , Comparing strings , Manipulating and searching strings, Regular expressions, Arrays: Indexed Vs Associative arrays, Identifying elements of an array, Storing data in arrays, Multidimensional arrays, Extracting multiple values, Converting between arrays and variables, Traversing arrays, Sorting , Action on entire arrays, Using arrays.</p>	12
2	<p><b>Introduction to Object Oriented Programming:</b> Classes, Objects, Introspection, Serialization, Inheritance, Interfaces, Encapsulation, Files and directories: Working with files and directories, Opening and Closing, Getting information about file, Read/write to file, Splitting name and path from file, Rename and delete files, Reading and writing characters in file, Reading entire file, Random access to file data, Getting information on file, Ownership and permissions , Databases (PHP-PostgreSQL): Using PHP to access a database, Relational databases and SQL, PEAR DB basics, Advanced database techniques.</p>	12
3	<p><b>Web Techniques:</b> Variables ,Server information ,Processing forms, Setting response headers, Maintaining state, SSL , Handling email with PHP: Email background,Internet mail protocol, Structure of an email message, Sending email with PHP, Email attachments, Email id validation and verification, PHP error handling. XML: What is XML? , XML document Structure, PHP and XML, XML parser, The document object model, The simple XML extension, Changing a value with</p>	12

	simple XML.	
<b>4</b>	<b>WEB DESIGNING TECHNOLOGIES(JavaScript-DHTML):</b> 4.1) Overview of JavaScript, DHTML, Object Orientation and JavaScript, Basic Syntax (JS datatypes, JS variables ), Primitives, Operations and Expressions, Screen Output and keyboard input(Verification and Validation), JS Control statements, JS Functions, JavaScript HTML DOM Events(onmouseup, onmousedown, onclick, onload, onmouseover, onmouseout). JS Strings: JS String methods ,JS popup boxes(alert, confirm, prompt), Changing property value of different tags using DHTML (ex. adding innerhtml for DIV tag, changing source of image etc.). AJAX: Introduction of AJAX, AJAX web application model, AJAX –PHP framework, Performing AJAX validation, Handling XML data using php and AJAX, Connecting database using php and AJAX . PHP framework : Introduction to PHP framework, Features, Applications, One example like WORDPRESS.	12
		<b>48</b>

**Practical (Based on the above Units):**

Laboratory Practical based on the above units

**Books recommended**

1. Programming PHP By RasmusLerdorf and Kevin Tatroe, O'Reilly publication
2. Beginning PHP 5 , Wrox publication
3. PHP web sevices, Wrox publication
4. AJAX Black Book, Kogent solution
5. Mastering PHP , BPB Publication
6. PHP cookbook, O'Reilly publication
7. PHP for Beginners, SPD publication
8. Programming the World Wide Web , Robert W Sebesta(3rd Edition)

9. Check out Joomla!press
10. www.php.net.in
11. www.W3schools.com
12. www.wrox.com
13. https://api.drupal.org

***Mapping of Program Outcomes with Course Outcomes***

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3					3	2
CO2	2	2					
CO3	1	3	3				
CO4			2	1			
CO5			1		2		
CO6							
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct

**Justification for the mapping**

**PO 1 Disciplinary Knowledge**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

**PO 2 Critical Thinking and Problem solving**

CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

**PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.

CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.

**PO 4 Research-Related Skills**

CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.

**PO 5 Personal and Professional competence**

CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.

**PO 6 Effective Citizenship and Ethics**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

**PO 7 Environment and Sustainability**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

## **Paper 4: DIGITAL MARKETING OVERVIEW [Course Code -: ECDM304]**

**Duration: 03 hrs.    Marks: 100    Lectures: 48    Credits: Theory 12+ Practical 18  
(Total: 30)**

### **Course Objectives:**

1. To understand the fundamentals of digital marketing and its role in today's business environment.
2. To explore different digital marketing channels and strategies.
3. To learn how to develop effective digital marketing campaigns.
4. To understand the importance of data analytics in digital marketing.
5. To learn how to use different digital marketing tools and platforms.
6. To understand the ethical and legal considerations in digital marketing.
7. To develop critical thinking and problem-solving skills in the context of digital marketing.

### **Course Outcomes:**

- CO1. Students will be able to demonstrate a comprehensive understanding of digital marketing principles and concepts.
- CO2. Students will be able to analyze and evaluate different digital marketing channels and strategies.
- CO3. Students will be able to develop and execute effective digital marketing campaigns.
- CO4. Students will be able to use data analytics tools to measure and analyze the performance of digital marketing campaigns.
- CO5. Students will be able to use different digital marketing tools and platforms to create and manage digital marketing campaigns.
- CO6. Students will be able to identify and address ethical and legal issues in digital marketing.
- CO7. Students will be able to apply critical thinking and problem-solving skills to real-world digital marketing challenges.

### **CONTENT OF SYLLABUS**

<b>UNIT</b>	<b>TOPIC</b>	<b>No. of Lectures</b>
<b>1</b>	<b>1. Digital Marketing Courses Overview</b> What is Digital Marketing?, Why Digital Marketing?, Scope of Digital Marketing, Benefits of Digital Marketing, Digital Marketing vs. Marketing, Various Digital marketing platforms & Techniques, Latest Digital Marketing Trends	12
<b>2</b>	<b>2. Search Engine and its basic's</b> What is Search Engine?, How Search Engine Works?, Why Digital Marketing?, Types of Search Engines, What is Spiders?, What is crawling?, What is Indexing?, Cache Date, How to check Cache Date?	12
<b>3</b>	<b>3. Social Media Marketing</b> SOCIAL MEDIA MARKETING – INTRODUCTION, What is Social Media? History of Social Media Marketing , Importance of Social Media, SMO Strategy for Business, SMO – Key Concepts, Business Profile Creation Brand Awareness, Social Engagement, Viral Marketing .	12
<b>4</b>	<b>4. Current trends in Digital Marketing</b> Domain & Hosting, Google Adwards & Analytics, Online Display Advertising, Video Marketing, Mobile Promotions, Lead Generation for Business, Content Marketing, Affiliate Marketing, Growth Hacking, Freelancing Projects.	12
		<b>48</b>

**Practical (Based on the above Units):**

Practical based on the above units

**PROJECT ON WEB MARKETING:**

Each student shall undertake a project on web marketing and submit it as a document (Word or PDF) or PowerPoint or other interactive presentation. Student shall apply basic principles

learned in this course. Student is expected to develop a web marketing plan for any organization – real or imaginary (proposed).

**The project shall include the following:**

1. Company Overview
2. Product and/or Service Description
3. Web Sales and Marketing Goals (traffic, sales, leads, brand awareness, etc.)
4. Website Purpose
5. Target Customer
6. Market Description/Competitive Analysis
7. SWOT Analysis
8. Unique Selling Proposition or Value Proposition
9. Revenue Generation
10. Web Marketing Medium Suggestion(s) (How will you get there?)
11. New Website/Web Redesign
12. Search Engine Marketing
13. E-mail
14. Online Advertising
15. Social Media
16. Affiliate Marketing
17. Website optimization/analytics
18. Viral Marketing

19. Traditional Media
20. Online Networking
21. Marketing Execution Plan
22. Budget
23. Tracking and Analysis (how can you tell when you're there, or what's working?)

## **Recommended Books:**

### **1 Text Books**

1. Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation by Damian Ryan, Calvin Jone. Kogan Page.
2. Marketing 2012 by William M. Pride, O. C. Ferrell, Cengage Learning.
3. Integrated Marketing Communications: Asia Pacific Edition by William Chitty, Nigel Barker, Michael Valos, Terence A. Shim, Cengage DigiMarketing: The Essential Guide to New Media and Digital Marketing by Kent Wertime, Ian Fenwick
4. Web Analytics 2.0: The Art of Online Accountability and Science of Customer Centricity by Avinash Kaushik

### **2 Reference Books**

5. Wiki Brands – Reinventing Your Company In A Customer Driven Market Place, Sean Moffitt and Mike Dover, TMGH.
6. Advanced Web Metrics with Google Analytics by Brian Clifton.
7. Data-Driven Marketing: The 15 Metrics Everyone in Marketing Should Know Mark Jeffery

### *Mapping of Program Outcomes with Course Outcomes*

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	1		1	3			
CO2	2						
CO3		3					2
CO4	2				3	1	
CO5							
CO6							
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

#### **Justification for the mapping**

##### **PO 1 Disciplinary Knowledge**

CO1. Students will be able to demonstrate a comprehensive understanding of digital marketing principles and concepts.

CO2. Students will be able to analyze and evaluate different digital marketing channels and strategies.

CO4. Students will be able to use data analytics tools to measure and analyze the performance of digital marketing campaigns.

##### **PO 2 Critical Thinking and Problem solving**

PO3. Students will be able to develop and execute effective digital marketing campaigns.

##### **PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO1. Students will be able to demonstrate a comprehensive understanding of digital marketing principles and concepts.

##### **PO 4 Research-Related Skills**

CO1. Students will be able to demonstrate a comprehensive understanding of digital marketing principles and concepts.

**PO 5 Personal and Professional competence**

CO4. Students will be able to use data analytics tools to measure and analyze the performance of digital marketing campaigns.

**PO 6 Effective Citizenship and Ethics**

CO4. Students will be able to use data analytics tools to measure and analyze the performance of digital marketing campaigns.

**PO 7 Environment and Sustainability**

PO3. Students will be able to develop and execute effective digital marketing campaigns.

## **Paper 5: Programming Lab on PHP [Course Code -: ECDM305]**

**Duration: 03 hrs.    Marks: 100    Lectures: 48    Credits: Theory 12+ Practical 18  
(Total: 30)**

### **Course Objectives:**

1. Understand the basics of web designing using PHP, including HTML, CSS, and JavaScript integration.
2. Learn the fundamentals of PHP programming, such as variables, data types, operators, control structures, functions, and arrays.
3. Gain knowledge of database integration with PHP, including connecting to a database, executing SQL queries, and handling data retrieval and storage.
4. Develop skills in creating dynamic web pages and implementing user interaction using PHP.
5. Learn how to work with PHP frameworks and libraries to enhance web development efficiency and functionality.
6. Understand the principles of responsive web design and create websites that are mobile-friendly and compatible with different devices and screen sizes.
7. Develop problem-solving skills and learn how to identify and debug common errors and issues in web designing using PHP.

### **Course Outcomes:**

- CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.
- CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.
- CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.
- CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.
- CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.
- CO6. Students will be able to create mobile-friendly websites and ensure compatibility across different devices and screen sizes.

CO7. Students will be able to apply problem-solving skills to design and develop efficient and effective web solutions using PHP.

### CONTENT OF SYLLABUS

UNIT	TOPIC	No. of Lectures
1	<p><b>Introduction of Web &amp; PHP:</b> What is PHP? The history of PHP, Why choose PHP?, Installation overview.</p> <p><b>Language Basics:</b> Variables Language Construct, Type Juggling, Deleting a Variabel, Operators, Comments, echo, print, if-else, Loops (for, while), switch.</p> <p><b>Datatypes:</b> What is Datatype Types of Datatype, Type Casting, Garbage Value.</p> <p><b>Arrays:</b>What is an Array Types of Array, print_r(), foreach, Important Built-in functions of array :, explode(), implode(), shuffle(), rand(), count(), array_key_exists(), 2 array_reverse(), sort(), ksort(), rsort(), array_push(), array_pop(), array_merge(), array_key_exists(), array_reverse(), Multi-dimensional Arrays.</p>	12
2	<p><b>Functions:</b> What is a function? Types of Function, return statement, How to call a function, Function without parameters, Function with parameters, Static Variable, Difference between Call By Value and Call By Reference, Important Built-in functions of array :, ceil(), floor(), round(), fun_get_args(), fun_num_args().</p> <p><b>Working with Forms:</b> What is a Form? Important HTML Tags, Super-Global Variable, Different ways to carry form data (GET, POST), isset(), isempty().</p> <p><b>Regular Expression :</b> What is Regular Expression? Important Symbols used in regular expression with explanation, Validations</p> <p><b>Session:</b> What is a Session?, Creating a Session, Use of Session, Destroying a Session, Login/Logout.</p> <p><b>Cookie:</b> What is a Cookie? Cookie &amp; Deleting a Cookie, Fetching value of Cookie , Creating a Cookie , Types of Cookie .</p>	12
3	<b>XML?</b> , XML document Structure, PHP and XML, XML parser, The	12

	document object model, The simple XML extension, Changing a value with simple XML. <b>AJAX:</b> Introduction of AJAX, AJAX web application model, AJAX –PHP framework, Performing AJAX validation, Handling XML data using php and AJAX, Connecting database using php and AJAX	
<b>4</b>	<b>Working with Files and Directories File system basics:</b> Understanding file permissions, Setting file permissions, PHP permissions, Accessing files, Writing to files, Deleting files, Moving the file pointer, Reading files, Examining file details, Working with directories, Viewing directory content <b>Sending Emails</b> Configuring PHP for email, Sending email with mail(), Using headers, Reviewing SMTP, Using PHPMailer,	12
		<b>48</b>

**Practical (Based on the above Units):**

Laboratory Practical based on the above units

**Books recommended**

2. Programming PHP By RasmusLerdorf and Kevin Tatroe, O'Reilly publication
3. AJAX Black Book, Kogent solution
4. Mastering PHP , BPB Publication
5. Programming the World Wide Web , Robert W Sebesta(3rd Edition)
6. [www.php.net.in](http://www.php.net.in)
7. [www.W3schools.com](http://www.W3schools.com)
8. [www.wrox.com](http://www.wrox.com)
9. <https://api.drupal.org>

### *Mapping of Program Outcomes with Course Outcomes*

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3					3	2
CO2	2	2					
CO3	1	3	3				
CO4			2	1			
CO5			1		2		
CO6							
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

#### **Justification for the mapping**

##### **PO 1 Disciplinary Knowledge**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

##### **PO 2 Critical Thinking and Problem solving**

CO2. Students will be able to create dynamic web pages and implement user interaction using PHP.

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

##### **PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO3. Students will be able to integrate databases with PHP and perform CRUD (Create, Read, Update, and Delete) operations.

CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.

CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.

#### **PO 4 Research-Related Skills**

CO4. Students will be able to use PHP frameworks and libraries to enhance web development efficiency and functionality.

#### **PO 5 Personal and Professional competence**

CO5. Students will be able to identify and debug common errors and issues in web designing using PHP.

#### **PO 6 Effective Citizenship and Ethics**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

#### **PO 7 Environment and Sustainability**

CO1. Students will be able to design and develop responsive websites using PHP, HTML, CSS, and JavaScript.

## **Paper 6: MANAGEMENT INFORMATION SYSTEM [Course Code -: ECDM306]**

**Duration: 03 hrs.      Marks: 100      Lectures: 48      Credits: Theory 12+ Practical 18 (Total: 30)**

### **Course Objectives:**

1. Understand the fundamental concepts and importance of Management Information Systems (MIS) in organizations.
2. Gain knowledge about the different components and functions of MIS.
3. Develop skills in identifying, analyzing, and solving business problems using technology and information systems.
4. Learn how to design, develop, and implement information systems to support business operations, decision-making, and strategic planning.
5. Become familiar with the ethical and legal issues related to information systems and technology.
6. Enhance critical thinking and problem-solving abilities through case analysis and group discussions.
7. Gain an understanding of emerging trends and technologies in MIS and their implications for organizations.

### **Course Outcomes:**

- CO1. Demonstrate a clear understanding of the fundamental concepts and importance of Management Information Systems.
- CO2. Identify and explain the various components and functions of MIS in organizations.
- CO3. Apply analytical skills to identify business problems and propose technology-based solutions.
- CO4. Design and develop information systems to support business operations, decision-making, and strategic planning.
- CO5. Evaluate the ethical and legal implications of using information systems and technology in organizations.
- CO6. Analyze real-world case studies and apply information systems concepts to solve business problems.

CO7. Demonstrate an awareness of emerging trends and technologies in MIS and their potential impact on organizations.

### CONTENT OF SYLLABUS

UNIT	TOPIC	No. of Lectures
1	<p><b>Management Information Systems:</b> Need, Purpose and Objectives - Data, Information, Knowledge – Types of Information Systems - Information as a strategic resource - Use of information for competitive advantage</p> <p><b>Information Technology Infrastructure:</b> Information Systems Architecture and Networking Devices – Networks Types - Topologies of Networks</p>	12
2	<p><b>Systems Engineering Analysis and Design:</b> Systems Concept - Systems Development Life Cycle - Assessing Enterprise Information requirements – Alternative System Building Approaches - Prototyping - Rapid Development Tools – CASE Tools – Object Oriented Systems (<i>Only introduction to these tools &amp; techniques</i>)</p>	12
3	<p><b>Decision Support Systems:</b> Data Warehousing and Data Mining - Business Intelligence and Analytics - Group Decision Support Systems – Executive Information Systems - Executive Support Systems – Geographical Information Systems - Expert Systems and Knowledge Based Expert Systems – Artificial Intelligence</p>	12
4	<p><b>Digital firm Perspective:</b> MIS Model for a digital firm – Organization Structure for digital firm – e-Business Models and Applications – Mobile computing, Call Centers, BPO</p> <p><b>Management Issues in MIS:</b> Information Security and Control - Quality Assurance - Ethical and Social Dimensions - Intellectual Property Rights as related to IT Services / IT Products</p>	12

	<b>Applications of MIS</b> in functional areas as well as in the service sector should be covered with the help of minimum 5 case studies.	
		<b>48</b>

**Practical (Based on the above Units):**

Laboratory Practical based on the above units

**Reference Books**

1. Management Information Systems by Jaiswal and Mittal, Oxford University Press
2. Decision Support Systems and Intelligent Systems by Turban and Aronson, Pearson Education Asia
3. MIS-Bidgoli/Chattopadhyay- Cengage Learning
4. Management Information Systems by Obrien, Marakas and Ramesh Behl, TMGH
5. Management Information Systems by Dr. D. B. Bharati & Rohan Dahivale Himalaya Publications
6. Management Information Systems by Jawadekar, TMGH, 4th Edition

***Mapping of Program Outcomes with Course Outcomes***

Course Outcomes	Programme Outcomes (POs)						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	1		1	3			3
CO2	2						
CO3		3					
CO4					3	1	
CO5							
CO6	3						
CO7							

**Weightage:** 1= weak or low relation, 2= moderate or partial relation, 3= strong or direct relation

## **Justification for the mapping**

### **PO 1 Disciplinary Knowledge**

CO1. Demonstrate a clear understanding of the fundamental concepts and importance of Management Information Systems.

CO2. Identify and explain the various components and functions of MIS in organizations.

CO6. Analyze real-world case studies and apply information systems concepts to solve business problems.

### **PO 2 Critical Thinking and Problem solving**

CO3. Apply analytical skills to identify business problems and propose technology-based solutions.

### **PO 3 Social Competence Exhibit thoughts and ideas effectively in writing and orally**

CO1. Demonstrate a clear understanding of the fundamental concepts and importance of Management Information Systems.

### **PO 4 Research-Related Skills**

CO1. Demonstrate a clear understanding of the fundamental concepts and importance of Management Information Systems.

### **PO 5 Personal and Professional competence**

CO4. Design and develop information systems to support business operations, decision-making, and strategic planning.

### **PO 6 Effective Citizenship and Ethics**

CO4. Design and develop information systems to support business operations, decision-making, and strategic planning.

### **PO 7 Environment and Sustainability**

CO1. Demonstrate a clear understanding of the fundamental concepts and importance of Management Information Systems.