

5 Years Integrated M.Sc.(IT) – Semester 6
Lesson Planning
060010606 - DSE12 Open Source Web Technology

Objective: To provide knowledge of creating responsive dynamic web pages, interaction between those pages and database operations using open source web based scripting language.

CO1: Understand the basic concepts of programming with PHP.

CO2: Identify use of functions, array and object oriented concepts and implement those concepts.

CO3: Design, develop rich GUI based website.

CO4: Developed and dynamic website using PHP MySQL.

CO5: Developing responsive web page.

Unit	Unit Name	Sub Unit	Topics	No. of Lect ures	Reference Chapter/Additional Reading	Teaching Methodology
1	PHP Introduction, Array and Functions	1.1.	Subject Overview and Importance, HTML concept	1		Demonstration and PPT Presentation
		1.2.	Essential PHP: PHP introduction, inventions and versions, Parsing of PHP code PHP Data types, Variables, Constants and Operators	1	SH#1,Page No. 1-25, SH#1, Page No. 26-39,SH#2,Page No. 41-62,SS#4,Page No. 40-55	
		1.3.	Control Structure and Loop Statements	1	SH#2, Page No. 63-80,SS#5,Page No. 71-79,H0#2,33	
		1.4.	Overview of Array and Types of array	1	SH#3,Page No. 92-121,SS#8,Page No. 131-151,H0#3,57-103	
		1.5.	User Defined Function in PHP	1	SH#4, Page No.123-160 , SS#5,Page No. 86-90, H0#2,Page No. 43-45	
		1.6.	Function : String, Math and Date Function	1	SH#3,Page No. 81-91, SH2#,PageNo.43-46, SS#23,Page No.405-407,SS#7,Page No. 117-130, SS#9,Page No. 158-164, SS#26,Page No. 443-454, SS#27,Page No.455-470	
		1.7.	Include and Require Statement	1	SH#4,Page No. 157	

Mr. Vipul Gamit & Ms. Komal Domadiya

2	Object Oriented Programming	2.1.	Class and Object	1	SH#7,Page No. 246-253	Demonstration and PPT Presentation
		2.2.	Setting Access to Properties and Methods	1	SH#7,Page No. 253-257	
		2.3.	Constructor and Destructor	1	SH#7,Page No. 257-261	
		2.4.	Inheritance, Abstract Class and Interface	2	SH#7,Page No. 263-271,SH#8,Page No. 294-300	
		2.5.	Method Overriding and Overloading	1	SH#7,Page No. 271-277	
		2.6.	Autoloading Classes	1	SH#7,Page No. 277-279	
		2.7.	Error Handling	1	SS#30,Page No. 497-509,	
3.	Reading Data in web pages	3.1.	Setting Up Web Pages	1	SH#5,Page No. 161-164	Demonstration and PPT Presentation
		3.2.	FORM Element and INPUT Element	2	SH#5,Page No. 164-170	
		3.3.	Redirecting Methods: Get post and request	1	SH#5,Page No. 165-167	
		3.4.	Handling Basic Controls	2	SH#5,Page No. 164-200	
		3.5.	Client-Side Data Validation	2	https://jqueryvalidation.org/	
		3.6.	Handling HTML Tags in User Input	1	http://www.w3schools.com/php/func_string_strip_tags.asp	
4.	State Management	4.1.	Overview and Techniques	1	HO#10,Page No. 339	Demonstration and PPT Presentation
		4.2.	Dealing with Cookies	2	SH#11,Page No. 395-402,SS#24,Page No.422-427	
		4.3.	Session Management	2	HO#10,Page No.340	
		4.4.	Advantages and Disadvantages of State Management Techniques	1	http://www.dotnetgallery.com/kb/resource86-Advantages-and-Disadvantages-of-Session.aspx	
		4.5.	Global Variables	2	HO#2,Page No. 47	
5.	Working with MySQLi Database	5.1.	Introduction of MySQLi	1	http://www.w3schools.com/php/php_ref_mysqli.asp	Demonstration and PPT Presentation
		5.2.	Manage Database Connection	1		
		5.3.	DDL Statement with MySQLi Function	2		
		5.4.	CRUD Operation with MySQLi Function	3		
		5.5.	Sorting of Data	2		
6.	Jquery and Ajax	6.1.	Overview of Jquery	1	http://www.w3schools.com/jquery/	Demonstration and PPT Presentation
		6.2.	Jquery Selectors	1		
		6.3.	Jquery Events	2		
		6.4.	Jquery Effects	2		
		6.5.	Jquery Methods	2		

Text Book:

- | | |
|--|--|
| | 1. Stever holzner, The Complete Reference PHP, Mc Graw Hill [SH] |
|--|--|

Reference Books:

- | | |
|--|--|
| | <ol style="list-style-type: none">1. Steve Suehring, Tim Converse and Joyce Park, PHP6 and MySQL, Wiley India Pvt. Ltd. [SS]2. PHP and MySQL, Hugh E. Williams, O'Reilly [HO]3. Professional PHP Programming, Jesus Castagnetto, Wrox Press Ltd [JW] |
|--|--|