

Lesson Plan

Name of faculty : **Monika Rohilla**
Discipline : **Computer Engineering**
Semester : **5th**
Subject : **WEBTECHNOLOGIES**
Lesson Plan Duration : **16Weeks (from 4Aug 2025 to 26Nov2025)**
Work Load (Lecture/Practical) per week (in hours): Lectures-03Practical -04

Week	Theory		Practical	
	Lecture day	Topic (including assignment/test)	Practical day	Topic
1st	1st	Introduction to HTML5 and CSS 3. Basic structure of HTML	1st	Design PHP based web pages using correct PHP, CSS, and XHTML syntax, structure.
	2nd	designing a web page, inserting links images, horizontal rules, comments.		
	3rd	Formatting text, title, headings colors, fonts, sizes		
2nd	4th	Simple tables and forms.	2nd	Design PHP based web pages using correct PHP, CSS, and XHTML syntax, structure.
	5th	HTML tags ,hyperlinks. Adding graphics and images		
	6th	Image maps, image files. Using tables, forms, style sheets and frames. Floating of web site/pages.		
3rd	7th	Introduction to PHP: How PHP Works	3rd	Design SQL language within MySQL and PHP to access and manipulate databases.
	8th	The php.ini File, Basic PHP Syntax, PHP variables		
	9th	Statements ,operators, Decision making, loops		
4th	10th	arrays, strings, forms, get and post methods, functions.	4th	Install and configure both PHP and MySQL.
	11th	Introduction to cookies, storage of cookies at client side, Using information of cookies.		
	12th	Creating single or multiple server side sessions.		
5th	13th	Timeout in sessions, Event management in PHP.	5th	Seminar/Viva
	14th	Introduction to content management systems Based on PHP.		
	15th	Sessional test I		
6th	16th	Introduction to MySQL,	6th	Create PHP code that utilizes the

	17 th	connecting to MySQL, database,		Commonly used API library functions built into PHP.
	18 th	creation,insertion,deletion		
7 th	19 th	Retrieval of MySQLdata using PHP.	7 th	Design and create a complete web site that demonstrates good PHP/ MySQL client/server design.
	20 th	Installing Wamp Server-		
	21 st	Installing Joomla on Web Server,		
8 th	22 nd	- Joomla global configuration-Article manager	8 th	cookie using PHP on client side.
	23 rd	- Archive manager-FrontPage manager		
	24 th	Section manager - Category manager- Media Manager-Menumanager- Component manager		
9 th	25 th	Content Manager- Extensions manager- Module manager-	9 th	To save the user session on server side.
	26 th	Plugin manager-Template manager-How to install a new module-		
	27 th	How to install a new template-How to install a new plugin-		
10 th	28 th	How to install a new component-Understanding the concept of Joomla positions	10 th	Seminar/Viva
	29 th	-Changing the layout Structure by changing the module position.		
	30 th	Sessional Test II		
11 th	31 st	Understanding Basic Joomla Template-	11 th	Design web site using Joomla.
	32 nd	Customizing Joomla template -		
	33 rd	Building Custom Joomla Template-Understanding Templatedetails.xml		
12 th	34 th	File-Creating Templatedetails.xml	12 th	Design web site using Joomla.
	35 th	File using tmpl_builder Linking CSS-		
	36 th	Linking JavaScript- Understanding		
13 th	37 th	Include-Displaying Content in Xhtml-	13 th	Design web site using Joomla.
	38 th	Creating Template installation Package-		

	39 th	Creating Custom Forms-		
14 th	40 th	Changing the Form Appearance using CSS.	14 th	Design website using Joomla.
	41 st	Overview/Revision of unitI		
	42 nd	Overview/Revision of unitII		
15 th	43 rd	Overview/Revision of unit III	15 th	Seminar/Viva
	44 th	Overview/Revision of unit IV		
	45 th	Sessional test III		

Name of Faculty : Anil Parkash
Discipline : Computer Engg.
Semester : 5th
Subject : Python
Lesson Plan Duration: 04-08-2025-17-11-2025
Work Load Lecture per week (in hours): Lecturer-03

Week	Days	Topic to be Taught
1 st	1	Unit-1 The way of the program: The Python programming language , What is a program?
	2	What is debugging? , Syntax errors, Runtime errors,
	3	Semantic errors, Experimental debugging
2 nd	4	Variables, Expressions and Statements: Values and data types, Variables, Variable names and
	5	keywords, Statements, Evaluating expressions,
	6	Operators and operands, Type converter functions,
3 rd	7	Order of operations, Operations on strings, Input, Composition,
	8	The modulus operator. Conditionals: Boolean values and expressions,
	9	Logical operators, Simplifying Boolean Expressions, Conditional execution,
4 th	10	Chained conditionals, Nested conditionals, The return statement, Logical opposites.
	11	Unit-2 Iteration: Assignment, Updating variables, The for loop
	12	, The while statement The Collatz $3n + 1$ sequence, Tables, Two-dimensional tables, Paired Data
5 th	13	Nested Loops for Nested Data. Strings: Working with strings as single things, Working with the parts of a string, Length, Traversal
	14	and the for loop, Slices, String comparison, Strings are immutable, The in and not in operators find function, Looping and counting
	15	Optional parameters, The built-in find method, The split method, Cleaning up your strings
6 th	16	The string format method. Tuples: Tuples are used for grouping data, Tuple assignment, Tuples as return values,
	17	Composability of Data Structures. Lists: List values, Accessing elements, List length, List membership,
	18	List operations, List slices, Lists are mutable, List deletion, Objects and references, Aliasing, Cloning lists, Lists and for loops,
7 th	19	List parameters, List methods, Pure functions and modifiers,
	20	Functions that produce lists, Strings and lists, list and range
	21	, Nested lists, Matrices. Functions: Functions with arguments and return values
8 th	22	Revision
	23	Unit-3 Modules: Random numbers, The time module,
	24	The math module, Creating your own modules,
9 th	25	Namespaces, Scope and lookup rules,
	26	Attributes and the dot operator.
	27	Files: About files, Writing our first file, Reading a file line-at-a-time,
10 th	28	Turning a file into a list of lines, Reading the whole file at once,
	29	Working with binary files, Directories, fetching something from the web.
	30	List Algorithms: Linear search, Binary search,
11 th	31	Merging two sorted lists.
	32	Unit -4 Object oriented programming: Classes and Objects- The Basics, Attributes
	33	Adding methods to our class, Instances as arguments and parameters
12 th	34	Converting an instance to a string , Instances as return values,
	35	Objects are mutable, Sameness, Copying

	36	Exceptions: Catching exceptions, raising our own exceptions,
13 th	37	the finally clause of the try statement
	38	Inheritance: Polymorphism, Generalization, Pure functions
	39	Unit 5 GUI: Creating Graphical User Interfaces, Using Module Tkinter
14 th	40	, Building a Basic GUI, Models,
	41	Views, and Controllers, Customizing the Visual Style, Few More Widgets
	42	Databases: Overview, Creating and Populating,
15 th	43	Retrieving Data, Updating and Deleting
	44	, Using NULL for Missing Data, Using Joins to Combine Tables
	45	, Keys and Constraints, Advanced Features.

LessonPlan

Name of the Faculty : Abhey Singh
Discipline : ComputerEngg.
Semester : 5thSem
Subject : ComputerNetwork
Lesson Plan Duration : 15weeks

WorkLoad (Lecture/Practical)perweek(inhours):Lectures-03,Practical-03

Week	Theory		Practical		
	Lecture day	Topics	Practical Day	Topic	
1 st	1 st	Networks Basics	1 st	Recognize the physical topology and cabling (coaxial,OFC,UTP,STP) of a network.	
	2 nd	Concept of network Models of network computing			
	3 rd	Networking models			
2 nd	4 th	Peer-to-peerNetwork			Recognition and use of varioustypesofconnectors RJ-45, RJ-11,BNC and SCST
	5 th	ServerClientNetwork Network Services			
	6 th	Conceptofswitching SwitchingTechniques			
3 rd	7 th	OSIModel	Recognition of network devices (Switches, Hub, Routersofaccesspointsfor Wi-Fi		
	8 th	OSIReferenceModel			
	9 th	OSIReferenceModel			
4 th	10 th	OSIReferenceModel			
	11 th	OSIReferenceModel			

	12 th	OSIReferenceModel	2 nd	Makingofcrosscableand straight cable
5 th	13 th	OSIReferenceModel		
	14 th	FunctionofvariouslayersinOSIReference Model		
	15 th	FunctionofvariouslayersinOSIReference Model		
6 th	16 th	FunctionofvariouslayersinOSIReference Model		
	17 th	FunctionofvariouslayersinOSIReference Model	3 rd	Installandconfigurea networkinterfacecardina
Week	Theory		Practical	
	Lecture day	Topics	Practical Day	Topic
	18 th	FunctionofvariouslayersinOSIReference Model		workstation IdentifytheIPAddressofa workstation and the class of the address and configure the IP Address onaworkstation
7 th	19 th	IntroductiontoTCP/IP		
	20 th	Conceptofphysicalandlogicaladdressing IPV4 addressers- Address space,		
	21 st	Notations,ClassfulAddressing,Classless Addressing,NetworkAddressTranslation		
8 th	22 nd	DifferentclassesofIPAddressing,specialIP address	4 th	Managinguseraccountsin windows and LINUX
	23 rd	DifferentclassesofIPAddressing,specialIP address		
	24 th	Subnettingandsuper netting		
9 th	25 th	Subnettingandsuper netting		
	26 th	Loopbackconcept IPV4andIPV6packetFormat		
	27 th	Loopbackconcept IPV4andIPV6packetFormat		
10 th	28 th	NetworkArchitecture		Study and Demonstration ofsubnettingofIPaddress
	29 th	EthernetSpecificationandStandardization:		
	30 th	10Mbps(TraditionalEthernet),		

11 th	31 st	10Mbps(FastEthernet)and1000Mbps (Gigabit Ethernet),IntroductiontoMedia)	5 th	UseofNetstatandits options. Connectivity troubleshootingusing PING, IPCONFIG, IFCONFIG
	32 nd	Connectivity(Leasedlines,ISDN,PSTN, RF,		
	33 rd	DSL,VSAT,OpticalandIPLC		
12 th	34 th	Connectivitydevices		
	35 th	NetworkconnectivityDevices 100 NICs Hubs,bridges		

Week	Theory		Practical	
	Lecture day	Topics	Practical Day	Topic
		Repeaters,switches Routers Gateways		
	36 th	Multiplexers Modems		
13 th	37 th	NetworkTroubleShooting Techniques	6 th	Installation of Network OperatingSystem(NOS) Visittonearbyindustryfor latest networking techniques
	38 th	Trouble Shooting process TroubleShootingTools:,,		
	39 th	PING,IPCONFIG		
14 th	40 th	PING,IPCONFIG		
	41 st	IFCONFIG, NETSTAT		
	42 nd	TRACEROOT,Wiresharp/Dsniffer/Pcop		
15 th	43 rd	IEEE802.11- Architecture		
	44 th	IEEE802.11- Architecture		
	45 th	Bluetooth-Architecture		

