

Name of the Faculty
Discipline
Semester

: Mr.Devender Kumar
: Computer Engineering
: 5th
Object Oriented Programming
using
: Python

Subject

Lesson Plan

Week	Theory		Practical	
	Theory	Topic (including assignment / test)	Lab	Topic
1	1st Day	Brief History of Python • Python Versions • Installing Python	1st	Getting started with Python and IDLE in interactive and batch modes
	2nd Day	Environment Variables • Executing Python from the Command Line • IDLE		Getting started with Python and IDLE in interactive and batch modes
	3rd Day	Editing Python Files • Python Documentation • Getting Help		Getting started with Python and IDLE in interactive and batch modes
2	4th Day	Dynamic Types • Python Reserved Words • Naming Conventions	2nd	What do the following string methods do? • lower • count • replace
	5th Day	Basic Syntax ,Comments , String Values		What do the following string methods do? • lower • count • replace
	6th Day	String Methods • The format Method • String Operators • Numeric Data Types		What do the following string methods do? • lower • count • replace
3	7th Day	Conversion Functions • Simple Output • Simple Input	3rd	Revision and file checking
	8th Day	The % Method • The print Function		Revision and file checking
	9th Day	Indenting Requirements • The if Statement		Revision and file checking
4	10th Day	Relational and Logical Operators • Bit Wise Operators	4th	Create a string containing at least five words and store it in a variable Print string.
	11th Day	The while Loop		Create a string containing at least five words and store it in a variable Print string.
	12th Day	Break and continue		Create a string containing at least five words and store it in a variable Print string.
5	13th Day	The for Loop	5th	Convert the string to a list of words using the string split method Sort the list into reverse order using list methods Print sorted, reversed list of words
	14th Day	Revision of syllabus and signment-1		Convert the string to a list of words using the string split method Sort the list into reverse order using list methods Print sorted, reversed list of words
	15th Day	Collections		Convert the string to a list of words using the string split method Sort the list into reverse order using list methods Print sorted, reversed list of words
6	16th Day	Lists	6th	Write a program that determines whether the number is prime
	17th Day	Tuples		Write a program that determines whether the number is prime
	18th Day	Sets		Write a program that determines whether the number is prime
7	19th Day	Dictionaries ,Sorting Dictionaries	7th	Find numbers which are multiple of 17 but not the multiple of 5 between 2000 & 2500?
	20th Day	Copying Collections		Find numbers which are multiple of 17 but not the multiple of 5 between 2000 & 2500?
	21st Day	Functions • Defining Your Own Functions • Parameters		Find numbers which are multiple of 17 but not the multiple of 5 between 2000 & 2500?
	22nd Day	Function Documentation • Keyword and Optional Parameters • Passing Collections		Revision and file checking

8	23rd Day	Variable Number of Arguments • Scope • Functions - "First Class Citizens"	8th	Revision and file checking
Week	Theory		Practical	
	Theory	Topic (including assignment / test)	Lab	Topic
	24th Day	Passing Functions to a Function • map		Revision and file checking
9	25th Day	Mapping Functions in a Dictionary • Lambda • Inner Functions • Closures	9th	Swap two integer numbers using a temporary variable
	26th Day	Modules • Standard Modules - sys		Swap two integer numbers using a temporary variable
	27th Day	Standard Modules - math • Standard Modules - time		Swap two integer numbers using a temporary variable
10	28th Day	The dir Function	10th	Find the largest of n numbers, using a user defined function largest().
	29th Day	Revision and Assignment-2		Find the largest of n numbers, using a user defined function largest().
	30th Day	Exceptions		Find the largest of n numbers, using a user defined function largest().
11	31st Day	Errors • Runtime Errors	11th	Write a function myReverse() which receives a string and returns the reverse
	32nd Day	The Exception Model • Exception Hierarchy		Write a function myReverse() which receives a string and returns the reverse
	33rd Day	Handling Multiple Exceptions • Raise • assert		Write a function myReverse() which receives a string and returns the reverse
12	34th Day	Data Streams • Creating Your Own Data Streams • Access Modes	12th	Check if a given string is palindrome or not
	35th Day	Writing Data to a File • Reading Data From a File • Additional File Methods		Check if a given string is palindrome or not
	36th Day	Using Pipes as Data Streams • Handling IO		Check if a given string is palindrome or not
13	37th Day	Classes in Python • Principles of Object Orientation • Creating Classes	13th	WAP to convert Celsius to Fahrenheit
	38th Day	Instance Methods • File Organization • Special Methods		WAP to convert Celsius to Fahrenheit
	39th Day	Class Variables • Inheritance • Polymorphism		WAP to convert Celsius to Fahrenheit
14	40th Day	Regular Expressions • Simple Character Matches • Special Characters Classes	14th	Find the ASCII value of characters
	41st Day	Quantifiers • The Dot Character • Greedy Matches • Grouping		Find the ASCII value of characters
	42nd Day	Matching at Beginning or End • Match Objects • Substituting • Splitting a String		Find the ASCII value of characters
15	43rd Day	Compiling Regular Expressions • Flags	15th	WAP for simple calculator
	44th day	Revision and (Assignment-3)		WAP for simple calculator
	45th Day	Revision		WAP for simple calculator