

LESSON PLAN

NAME OF THE FACULTY: - Ajay Kumar Sapra

DISCIPLINE: - CSE

SEMESTER:-5TH

SUBJECT—Computer Programming Using Python

Lesson Plan Duration: - 15 weeks 15 weeks (from July, 2019 to November, 2019)

Work Load (Lecture/Practical) per week (In hours): Lecture 03, Practical -06

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Week	Topic
1 st	1 st	Brief History of Python,Python Versions,Installing Python,Environment Variables	1 st	1. Getting started with Python and IDLE in interactive and batch modes
	2 nd	Executing Python from the Command Line,IDLE,Editing Python, Files,Python Documentation		
	3 rd	Getting Help,Dynamic,Types,Python Reserved Words,Naming Conventions		
2 nd	4 th	Basic Syntax,Comments,StringValues,String Operators	2 nd	2.What do the following string methods do? • lower • count • replace
	5 th	String Methods,The format Method,Numeric Data Types,Conversion Functions		
	6 th	Simple Output,Simple Input,The % Method,The print Function		
3 rd	7 th	Indenting Requirements,The if Statement	3 rd	3. Write instructions to perform each of the steps below (a) Create a string containing at least five words and store it in a variable. (b) Print out the string. (c) Convert the string to a list of words using the string split method. (d)Sort the list into reverse alphabetical order using some of the list methods (you might need to use dir(list) or help(list) to find appropriate methods). (e) Print out the sorted, reversed list of words
	8 th	Relational and Logical Operators,Bit Wise Operators		
	9 th	The while Loop		
4 th	10 th	break and continue	4 th	4. Write a program that determines whether the number is prime?What is your favorite number? 24 24 is not prime What is your favorite number? 31
	11 th	The for Loop		
	12 th	Introduction		

				31 is prime
5 th	13 th	Lists	5 th	5. Find all numbers which are multiple of 17, but not the multiple of 5, between 2000 and 2500?
	14 th	Tuples		
	15 th	Sets		
6 th	16 th	Dictionaries	6 th	Swap two integer numbers using a temporary variable. Repeat the exercise using the code format: a, b = b, a. Verify your results in both the cases
	17 th	Sorting Dictionaries		
	18 th	Copying Collections		
7 th	19 th	Summary	7 th	7. Find the largest of n numbers, using a user defined function largest().
	20 th	Introduction, Defining Your Own Functions, Parameters		
	21 st	Function Documentation, Keyword and Optional Parameters, Passing Collections to a Function		
8 th	22 nd	Variable Number of Arguments, Scope	8 th	8. Write a function myReverse() which receives a string as an input and returns the reverse of the string.
	23 rd	Functions - "First Class citizens", Passing Functions to a Function, map		
	24 th	Filter, Mapping Functions in a Dictionary		
9 th	25 th	Lambda, Inner Functions, Closures	9 th	9. Check if a given string is palindrome or not
	26 th	Modules, Standard Modules – sys Standard Modules - math		
	27 th	Standard Modules – time, The dir Function		
10 th	28 th	Errors, Runtime Errors	10 th	10. Check if a given string is palindrome or not.
	29 th	The Exception Model, Exception Hierarchy		
	30 th	Handling Multiple, Exceptions, Raise		
11 th	31 st	Assert, Introduction, Data Streams	11 th	11. WAP to convert Celsius to Fahrenheit
	32 nd	Creating Your Own Data Streams, Access Modes, Writing Data to a File		
	33 rd	Reading Data From a File, Additional File Methods, Using Pipes as Data Streams, Handling IO Exceptions		
12 th	34 th	Classes in Python, Principles of Object Orientation	12 th	12. Find the ASCII value of charades
	35 th	Creating Classes		
	36 th	Instance Methods		
13 th	37 th	File Organization	13 th	13. WAP for simple calculator
	38 th	Special Methods		
	39 th	Class Variables		
14 th	40 th	Inheritance	14 th	Revision of Practicals
	41 st	Polymorphism		
	42 nd	Introduction, Simple Character Matches, Special characters, Character Classes		
15 th	43 rd	Quantifiers, The Dot Character, Greedy Matches	15 th	VIVA-VOCE
	44 th	Grouping, Matching at Beginning or		

		End,Match Objects,Substituting		
	45 th	String,CompilingRegular,Expressions, Flags		