LESSONPLAN

DISCIPLINE: - Computer Engg.
SEMESTER:- 5TH
SUBJECT— Computer Programming Using Python
Duration: - 15 Weeks (FROM SEP2022-JAN2022)
Work Load (Lecture/Practical) per week (In hours): Lecture03, Practical-06

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical Week	Topic
1st	1st	Brief History of Python, PythonVersions,InstallingPython, Environment Variables	1st	1. Getting started with Python andIDLEininteractiveand batch modes
	2nd	ExecutingPythonfromtheCommand Line,IDLE,EditingPython,Files,PythonDocumentation		
	3rd	Getting Help,Dynamic,Types,Python ReservedWords,NamingConventions		
2nd	4th	Basic Syntax,Comments,StringValues,String Operators	2nd	2. Whatdothefollowingstring methods do? • lower • count • replace
	5th	String Methods,The format Method,Numeric Data Types,Conversion Functions		
	6th	Simple Output,Simple Input,The % Method,The print Function		
3rd	7th	IndentingRequirements,TheifStatement	3rd	3. Write instructions to performeachofthestepsbelow (a) Createastringcontainingat leastfive wordsandstoreitina variable. (b) Printoutthestring. (c) Convertthestringtoalistof words using the string split method. (d)Sort the list into reverse alphabeticalorderusingsomeof thelistmethods(youmightneed to use dir(list) or help(list) to find appropriate methods). (e) Printoutthesorted,reversed list of words
	8th	RelationalandLogicalOperators,Bit Wise Operators		
	9th	ThewhileLoop		
4th	10th	breakand continue	4th	4. Write a program that determineswhetherthenumber is prime?What is your favorite number? 24 24 isnotprime Whatisyourfavoritenumber? 31
	11th	TheforLoop		
	12th	Introduction		
				31is prime
5th	13th	Lists	5th	5. Find all numbers which are multiple of 17, but not the multipleof5,between2000and 2500?
	14th	Tuples		
	15th	Sets		

6th	16th	Dictionaries	6th	Swaptwointegernumbersusing atemporaryvariable.Repeatthe exercise using the code format: a,b=b,a.Verifyyourresultsin boththe cases
	17th	SortingDictionaries		
	18th	CopyingCollections		
7th	19th	Summary	7th	7.Findthelargestofnnumbers, using a user defined function largest().
	20th	Introduction,DefiningYourOwn Functions,Parameters		
	21st	FunctionDocumentation,Keywordand OptionalParametersPassingCollections to a Function		
8th	22nd	VariableNumberofArgumentsScope	8th	8.WriteafunctionmyReverse() whichreceivesastringas an input and returns the reverse of the string.
	23rd	Functions-"FirstClasscitizens",Passing Functions to a Function,map		
	24th	Filter,MappingFunctionsinaDictionary		
9th	25th	Lambda,InnerFunctions,Closures	9th	9.Checkifagivenstringis palindromeornot
	26th	Modules,StandardModules–sys StandardModules-math		
	27th	StandardModules– time,ThedirFunction		
10th	28th	Errors,RuntimeErrors	10th	10.Checkifagivenstringis palindrome or not.
	29th	TheExceptionModel,ExceptionHierarchy		
	30th	HandlingMultiple,Exceptions,Raise		
11th	31st	Assert,Introduction,DataStreams	11th	11.WAPtoconvertCelsiusto Fahrenheit
	32nd	CreatingYourOwn Data Streams,AccessModes,WritingDatato a File		
	33rd	ReadingDataFromaFile,Additional FileMethods,UsingPipesasData Streams,Handling IO Exceptions		
12th	34th	ClassesinPython,PrinciplesofObject Orientation	12th	12. FindtheASCIIvalue of charades
	35th	CreatingClasses		
	36th	InstanceMethods		
13th	37th	FileOrganization	13th	13.WAPforsimplecalculator
	38th	SpecialMethods		
	39th	ClassVariables		
14th	40th	Inheritance	14th	RevisionofPracticals
	41st	Polymorphism		
	42nd	Introduction,SimpleCharacter Matches,Special,characters,Character Classes		
15th	43rd	Quantifiers,TheDotCharacter,GreedyMatc hes	15th	VIVA-VOCE
	44th	Grouping,MatchingatBeginning or		
		End,MatchObjects,Substituting		
	45th	String,CompilingRegular,Expressions, Flags		