SCHEME OF COURSE WORK

Department of Information Technology

Course Details:

COURSE TITLE	PYTHON LAB		
COURSE CODE	15CT11S2	L T P C	0 0 2 1
PROGRAM	B.TECH		
SPECIALIZATION	IT		
SEMESTER	VIII		
PRE REQUISITES	N/A		
COURSES TO WHICH IT IS A PRE REQUISITE	N/A		

Course Outcomes (COs):

1	Know comprehensions, generators in python.
2	Know exception handling in python
3	Know file I/O
4	Understand various data types like lists, tuples, strings etc
5	Know the usage of various predefined functions on the above data types

Course Outcome versus **Program Outcomes**

S - Strongly correlated, *M - Moderately* correlated, *Blank - No correlation*

Assessment Methods	Assignment / Quiz / Mid-Test

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3		3						3	3	3	3		
CO2	3				2			2			3		3		
CO3		3		3			2			3		3	3		
CO4	3	2		2						2	3		3		
CO5	2	3		3		2			2	3	2	3	3		

Teaching- Learning & Evaluation

Week	Topic/ Contents	Course Outcomes	Teaching learning strategy	Assessment method & schedule
1	Write a program to get the list of even numbers upto a given number	CO1	Programming	Viva-1
2	Write a program to get the binary form of a given number	CO1	Programming	Viva-2
3	Write a program to sort given list of strings in the order of their vowel counts.	CO1	Programming	Viva-3
4	Write a program to get the number of vowels in the input string	CO2	Programming	Viva-4
5	Write a program to return the top 'n' most frequently occuring Semester - VIII 282 G V P College of Engineering (Autonomous) 2016 IT chars and their respective counts. E.g. aaaaaabbbbbcccc, 2 should return [(a 5) (b 4)]	CO2	Programming	Viva-5
6	Write a program to convert a given iterable into a list. (Using iterator)	CO3	Programming	Viva-6
7	Write a program to implement round robin	CO2	Programming	Viva-7
8	Write a program return a list in which the duplicates are removed and the items are sorted from a given input list of strings	CO1	Programming	Viva-8
9	Write a program to implement left binary search.	CO2	Programming	Viva-9
10	Write a class Person with attributes name, age, weight (kgs), height (ft) and takes them through the constructor and exposes a method get_bmi_result() which returns one of "underweight", "healthy", "obese"	CO4	Programming	Viva-10
11	Write a program to test whether given strings are anagrams are not.	CO5	Programming	Viva-11
12	Write a program to convert the passed in positive integer number into its prime factorization form	CO5	Programming	Viva-12