



C. U. SHAH UNIVERSITY

Wadhwan City

FACULTY OF:- Computer Science

DEPARTMENT OF:- MCA

SEMESTER:- V

CODE :- 5CS05MTK1

NAME – PROGRAMMING TECHNIQUE-X (PYTHON)

Teaching and Evaluation Scheme

Subject Code	Name of the Subject	Teaching Scheme (Hours)				Credits	Evaluation Scheme							
		Th	Tu	Pr	Total		Theory				Practical (Marks)			Total
							Sessional Exam		University Exam		Internal		University	
							Marks	Hrs	Marks	Hrs	Pr/Viva	TW	Pr	
5CS05MTK1	PROGRAMMING TECHNIQUE-X (PYTHON)	0	0	4	4	2	30	1.5	70	3	20	---	80	100

PRACTICAL LIST:

1	Write a program in Python to define a list.
2	Write a program in Python to add elements to a list.
3	Write a program in Python to access sub lists.
4	Write a program in Python to search within lists.
5	Write a program in Python to delete elements from a list.
6	Write a program in Python to use mathematical Operators and lists.
7	Open a terminal. What directory are you in? List the files in your current directory. Make the following new directories - 'folder1/folder2/folder3'. Navigate to folder2 and create a file "catted.txt" using cat with the words "I made this!." Delete folder1, folder2 and folder3.
8	Create a list of cubes for all the positive integers less than 10 (i.e. [1,8,27,...,729]) using a) a for loop and b) a list comprehension.
9	Find all the characters that are used exactly once in the sentence "A person who never made a mistake never tried anything new". Ignore case, so 'A' and 'a' would be counted as 2 occurrences of 'a'.
10	Find the second largest number in this list [9, 61, 2, 79, 58, 87, 68, 83, 61, 13]
11	Write a program that generates this list [0,1,2,3,4,5,5,4,3,2,1,0]. Your program should only contain a single integer.
12	Write a program that uses while and raw_input and simply repeats the question "who wins?" until you type the



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	words “you win”.
13	Write a program that produces these 2 lines of output from range(1,11): 0001 0002 0003 0004 0005 6.00 7.00 8.00 9.00 10.00
14	Write a program that starts with range(1, 6) and ends up with this string ‘1-one-thousand-2-one-thousand-3-one-thousand-4-one-thousand-5’, using a list comprehension, the str() function and a string join.
15	Write a function that returns the cumulative sum of numbers in a list. For example, if the function is given the list [1,2,3,4,5], it should return the list [1, 3, 6, 10, 15].
16	Write a function fib that generates the first n Fibonacci numbers. The Fibonacci numbers are the sequence [1,1,2,3,5,8,13,...], where each successive number is the sum of the two preceding numbers.
17	Write a program that takes two arguments, your first name, and your age, and then prints out your name and the year you were born.
18	Write a program that takes a number on the command line and calculates the log, square, sin and cosine, and writes them out in a csv file.