

SARDAR VALLABHBHAI PATEL INSTITUTE OF TECHNOLOGY,VASAD

Academic Year: 2019-20_EVEN

Faculty Name: Ms. PATEL FALGUNIBEN NARENDRABHAI

Subject: Departmental Elective(Python)

Sem: 8

ClassName: LYIT-1

Sr.	Unit Number Name of Unit Hrs. Alloted by GTU	Lecture Number	Topics	Teaching Method	Teaching Aid	Online Posts (Y/N)
1	1 Introduction to Python 4	1	Introduction to python, basic elements of python	Lecture	Chalk & Talk	N
		2	Branching programs and control structures	Lecture	Chalk & Talk	N
		3	strings and input	Lecture	Chalk & Talk	N
		4	Iterations	Lecture	Chalk & Talk	N
2	2 functions,scopin g and abstraction 4	5	system functions and parameters	Lecture	Chalk & Talk	N
3	3 structured types, mutability and higher- ordered functions 4	6	strings,tuples,lists	Lecture	Chalk & Talk	N
		7	dictionaries, lists	Lecture	Chalk & Talk	N
		8	lists - continue, mutability	Lecture	Chalk & Talk	N
		9	functions as objects	Lecture	Chalk & Talk	N
4	4 testing, debugging,excep tions and assertions 3	10	types of testing - blackbox and glass box	Lecture	Chalk & Talk	N
		11	debugging, handling exceptions	Lecture	Chalk & Talk	N
		12	assertions	Lecture	Chalk & Talk	N
5	5 classes and obejct oriented	13	Abstract data types and classes	Lecture	Chalk & Talk	N
		14	Inheritance	Lecture	Chalk & Talk	N

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	programming 3	15	Encapsulation and information hiding	Lecture	Chalk & Talk	N
6	6 simple algorithms and data structures 3	16	search algorithms	Lecture	Chalk & Talk	N
		17	sorting algorithms and hash tables	Lecture	Chalk & Talk	N
		18	hash tables - continue	Lecture	Chalk & Talk	N
7	7 Advanced topics - I 8	19	Regular expressions - REs	Lecture	Chalk & Talk	N
		20	Regular expression - continue.	Lecture	Chalk & Talk	N
		21	plotting using PyLab	Lecture	Chalk & Talk	N
		22	plotting using Pylab - continue	Lecture	Chalk & Talk	N
		23	networking and multithreaded programming - Introduction	Lecture	Chalk & Talk	N
		24	socket programming with example	Lecture	Chalk & Talk	N
		25	threads and processes	Lecture	Chalk & Talk	N
		26	Chat application	Lecture	Chalk & Talk	N
8	8 Advanced topics - II 11	27	Introduction to security with python	Lecture	Chalk & Talk	N
		28	encryption and decryption	Lecture	Chalk & Talk	N
		29	classical cyphers -introduction	Lecture	Chalk & Talk	N
		30	classical cyphers -python programming	Lecture	Chalk & Talk	N
		31	introduction to graphics and GUI programming	Lecture	Chalk & Talk	N
		32	drawing using Turtle	Lecture	Chalk & Talk	N
		33	drawing using Turtle - continue	Lecture	Chalk & Talk	N
		34	Tkinter with python	Lecture	Chalk & Talk	N
		35	other GUIs library - introduction	Lecture	Chalk & Talk	N
		36	use of other GUIs library	Lecture	Chalk & Talk	N
		37	GTU paper solution	Lecture	Chalk & Talk	N

References:

John V Guttag, Introduction to computation and programming using python, prentice hall of india.

Signature