

FACULTY OF COMPUTER APPLICATIONS

Programme	B.Sc. IT (Infrastructure Management Services) (Hons.)					Branch/Spec.	Computer Applications					
Semester	III					Version	1.0.0.0					
Effective from Academic Year				2025-26		Effective for the batch Admitted in				June 2024		
Subject Code	U43C4IPP		Subject Name			Introduction to Python Programming						
Teaching scheme						Examination scheme (Marks)						
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE		SEE		Total	
	L	TU	P	TW								
Credit	3	-	1	-	4	Theory	50	50	100			
Hours	3	-	2	-	5							
Objective:												
Helpful to make a Career in Python Programming Language.												
Pre-requisites:												
Basic Knowledge of Programming in C Language Learning.												
Course Outcomes :												
Name of CO		Description										
CO1		Able to develop the python script-based utilities.										
CO2		Learn programmatic construct in python.										
CO3		Understand the concept of data structure in python.										
CO4		Experience to how to work with python functions and Handling Exceptions.										
Mapping of CO and PO												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1	2	0	2	1	2	0	1	3	2	1
CO2	2	1	2	0	2	1	2	0	1	3	2	1
CO3	2	2	3	1	3	1	2	0	1	3	2	1
CO4	2	2	3	1	3	1	2	0	1	3	2	1
Theory Syllabus												
Unit	Content											Hrs.
1	Fundamentals of Python What is Python Programming? Features of Python Programming, Installation of Python, Python Variables, Python Keywords, Multi-line statement, Python Indentation, Python Comments, Multi-line Comments, Values and Variables, Python Identifiers											10
2	Expressions and Arithmetic, Conditional Execution, Iteration Python Data Types, Python Operators, Boolean Expression, Python Decision Making: If Statement, If...Else Statement, The Elif Statement, Nested If, The Pass Statement, While Loop, For Loop, Nested Loops, The Break Statement, The Continue Statement											12

3	Python List, Tuple, Dictionary and Set Lists: Access List Items, Change List Items, Add List Items, Remove List Items, Sort Lists, Copy Lists, Join Lists, Loop Lists, Tuples: Access Tuple Items, Update Tuples, Join Tuples, Loop Tuples, Set: Access Set Items, Add Set Items, Remove Set Items, Loop Sets, Join Sets, Copy Sets, Dictionaries: Access Dictionary Items, Change Dictionary Items, Add Dictionary Items, Remove Dictionary Items, Loop Dictionaries, Copy Dictionaries	12
4	Python Functions and Handling Exceptions Python Functions: The built-in functions, Function Basics, Parameter Passing, Lambda function, Python Exceptions: Standard Exceptions, What Is Exception? Handling An Exception, The Except Clause with Multiple Exceptions, The Try-Finally Clause, Raising An Exception, User-Defined Exceptions	11
Text Books:		
1	Introduction to Programming using Python, Y. Daniel Liang, Pearson Education	
Reference Books:		
1	Head First Programming, A Brain Friendly Guide, Paul Barry & David Griffiths, O'Reilly	
2	Python The Complete Reference, Martin C. Brown, McGraw Hill Education	
Web References / MOOC / Certification Course:		
1	https://nptel.ac.in/courses/106106145	
2	https://onlinecourses.swayam2.ac.in/cec22_cs20/preview	
3	Certified Entry Level Python Programmer (PCEP)	
4	Certified Associate in Python Programming (PCAP)	
Question Paper Scheme:		
	University Examination Duration: 2 Hours Note for Examiner: Q-1 Must be common from any topics from the syllabus. Q-2 And onwards must be from specific topics and internal choice or option can be given. Paper Structure: Q-1 Must be from all Unit Any Five out of seven (25 Marks) (CO1, CO2, CO3, CO4) Q-2 Must be from Unit 1: Any Two out of Three (06 Marks) CO1 Q-3 Must be from Unit 2: Only one question without any option (05 Marks) CO2 Q-4 Must be from Unit 3: Any Two out of Three (08 Marks) CO3 Q-5 Must be from Unit 4: Any Two out of Three (06 Marks) CO4	