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1	INTRO TO PYTHON - History & Installation of Python - Python Shell & IDLE - First Python Program - Types of Mode to Run Program FUNDAMENTALS OF PYTHON - print() and input() function - Variables, Datatypes & Operators - Type Casting Constructors - id() and type() functions								2	-	A C	B D								
PR1	Fundamental Booster								1	_	/	10								
2	DATATYPE IN DETAIL - String Formatting & Manipulation - Collection Datatypes with Its Methods - Mutability of list & tuple - Shallow & Deep Copy - List Comprehension - Type Casting and del keyword								2	l	A C	B D								
PR2	Collection Manipulator								1	_	/	10								
3	CONTROL STRUCTURE - Types of Control Structure - Short Hand Syntax (Ternary) LOOPING - Types of Loops - range() function - Control Statements - Nested Loop								2	l	A C	B D								
PR3	Logic Box								2	_	/	10								
4	FUNCTION IN DETAIL - Built-in Functions - UDF - *args, **kwargs anddoc - Function Recursion - Anonymous / Lambda Function - Return Multiple Values ARRAY & SORTING - 1D & 2D Array with List - Sorting Collection Datatypes								3	l	A C	B D								
PR4	Functional Treat								2	_	/	10								
5	OBJECT ORIENTED PROGRAMMING (OOP) - Class & Object - self & del keyword - Constructor and Destructor - Encapsulation - Nested Function - Reflection Enabling Functions INHERITANCE & POLYMORPHISM - Types of Inheritance - Method Overloading & Method Overriding - issubclass() and super() - Built-in Dunder Methods - Operator Overloading								4	-	A C	B D								
PR5	OOP Wrapper								2	_	/	10								

6	EXCEPTION HANDLING - try except - try except else - try finally		A B	
	- try except else finally - Custom Exception - raise & assert keyword	2	C D	
PR6	Exception Killer	1	/10	
E1	Viva & Examination	1	/10	
7	FILE HANDLING - Modes of Opening File - CRUD operation with File	1	A B C D	
PR7	File Operator	1	/10	
8	WORKING WITH MODULES - datetime module - time module - math module - random module - operator module - uuid module	2	A B	
PR8	Moduler	1	/10	
9	MODULES AND PACKAGES - Creating, Importing & Renaming Modules name withmain - Creating & Using Package and Sub Packages - dir() andinitpy	1	A B C D	
PR9	Packager	1	/10	
10	REGULAR EXPRESSION (REGEX) - re module - Getting specific pattern wise data COMMAND LINE ARGUMENT (CLA) - sys module - sys.argy	2	A B C D	
PR10	RegEx Commander	1	/10	
11	PIP – PACKAGE MANAGER & DATABASE INTERACTION (WITH MYSQL) - What is SQL? - SQL Queries - Intro to XAMPP (phpMyAdmin) - CRUD operation with XAMPP (phpMyAdmin) - Downloading and Installing Package - mysql-connector module - CRUD operation with python's mysql.connector	4	A B C D	
PR11	DB Miner	2	/10	
12	GUI WITH TKINTER - tkinter module - widgets and grid() - Binding Functions - Mouse Clicking Events - messagebox() and PhotoImage()	5	A B	
PR12	Software Combo	5	/10	
E2	Viva & Final Exam	2	/100	

NOTE:

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- MARKS OUT OF 10 WILL BE GIVEN BY TUTOR

	One Step In Changing Education Chain	FACUI	LTY N	AME																	
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1	OS & SUBPROCESS MODULE - Basic terminal commands - os module - subprocess module with call() & Popen()									3	_	A C	B D								
PR1	Executor									3		/	10								
2	MULTITHREADING & EMAIL - What is thread in a process? - threading module - Working of email sending through Internet - smtplib module - email package									3	-	A C	B D								
PR2	Multi-threader & Mailer									3	_	/	10								
3	ITERATORS, GENERATORS & CLOSURES iter() &next() - iter() & next() - yield keyword - Generator Function - Generator Object - global, local & nonlocal variables									3	_	A C	B D]							
PR3	UDL									1		/	10								
4	HIGHER ORDER FUNCTIONS - sorted(), map(), reduce() & filter() DECORATORS - Simple Decorator - Chaining Decorator - @classmethod & @staticmethod - property() & @property									3	-	A C	B D								
PR4	Fast Food Maker									1	_	/	10								
5	VIRTUAL ENVIRONMENT - virtualenv - venv - requirements.txt - pipenv									2		A C	B D								
E1	Viva and Examination									1	ı	/	10								
6	WORKING WITH EDITORS & IDLE - Sublime Text 3 - VS Code - Anaconda Navigator - PyCharm IDE DATA ANALYSIS WITH NUMPY - NumPy library - NumPy Datatypes - Array Indexing - Array Math & Broadcasting - 1D & 2D Array									5		A C	B D								
PR5	- Arithmetic Operations on 2D Array NumPy Analyzer									3		/	10								
7	HOT MODULES OF PYTHON - qrcode mlibrary - pyinstaller library - csv module									4	_	A C	B D								

PR6	Hunter		6	/10	
8	DATA ANALYSIS WITH PANDAS - Pandas Library - Data Structure - Operations on DataFrames - Handling missing data - Boolean Reductions - Combining DataFrames - pivoting, sorting & aggregation - Descriptive Statistics - Types of Function Application - groupby() & transform() - Re-indexing& altering labels		5	A B C D	
PR7	Pandas Analyzer		2	/10	
9	DATA VISUALIZATION - matplotlib library - Types of Charts with pyplot		2	A B C D	
PR8	Visualizer		2	/10	
10	NETWORKING - What is Socket & Port? - What is Client & Server - socket module - Socket Programming		2	A B C D	
PR9	Chat App		3	/10	
11	WEB SCRAPPING - requests library - beautifulsoup library WEB AUTOMATION - selenium library - Different browser's WebDrivers		4	A B	
PR10	Scrapper & Bot		4	/10	
12	JSON PARSING - What is json? - json module - Serialization & Deserialization of data - Read and Write json data with File - Working with live json API data		3	A B	
PR11	Fetcher & Parser		5	/10	
13	Intro to Web Development - Basic HTML - What is Framework - Installing Flask microframework and Run first web app - Routing and Variable Rules - URL Building - HTTP Methods - Templates - Static Files - Sending Form data to Template - File Uploading		12	A B C D	
PR12	Resume Builder		5	/10	
E2	Viva and Final Exam		2	/100	

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