Reg. No.											

Question Paper Code	11745

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022
Second Semester
Information Technology
(Common to Artificial Intelligence and Data Science, Computer Science and Engineering &
M.Tech. - Computer Science and Engineering)
20ESIT202 - PYTHON PROGRAMMING
(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

		Marks, K-Level,CO
1.	List the various types of control flow structures.	2,K2,CO1
2.	Write the python code to square of a number.	2,K2,CO1
3.	What does the term mutability and immutability refers to?	2,K1,CO2
4.	Show how Comment is used in python.	2,K2,CO2
5.	What are lambda functions and its syntax?	2,K1,CO3
6.	Compare and Contrast Standard Library Modules – Globals() and Locals().	2,K2,CO3
7.	List the difference between errors and exceptions.	2,K2,CO4
8.	Describe renaming and deleting a file in python.	2,K2,CO4
9.	What is Data abstraction?	2,K1,CO5
10.	Differentiate between series and data frames in pandas.	2,K2,CO6

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

11. a) Write a simple python snippet, analyze different values, types and expression and explain them. — 13,K2,CO1

OR

b) (i) Write a python program to check whether a given year is a leap year or not. — 7,K2,CO1

(ii) Write the python code to convert Temperature in Celsius to Fahrenheit and vise-versa. — 6,K2,CO1

12. a) Demonstrate the working of +,* and slice operators in python lists and tuples. — 13,K2,CO2

OR

b) Write a program to search a value using Linear Search. — 13,K2,CO2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) Write a python program to generate the Fibonacci series using recursive function. *13,K2,CO3*

OR

b) Outline about function definition and call with example. Why are function needed? *13,K2,CO3*

14. a) Discuss the different modes for opening a file and closing a file. *13,K2,CO4*

OR

b) Describe in detail exception handling with sample program. *13,K2,CO4*

15. a) Design and construct programs for any four different types of plots in matplotlib. *13,K2,CO6*

OR

b) (i) Develop a python program to open CSV files using pandas. *7,K2,CO6*

(ii) Develop a python program to plot the points without line using Matplotlib. *6,K2,CO6*

PART - C (1 × 15 = 15 Marks)

16. a) Illustrate about the file reading and writing operation using the format operator in python code with its example program *15,K3,CO5*

OR

b) Write in different ways to create numpy arrays and how to perform indexing and slicing operations using numpy with examples? *15,K2,CO5*