SHRI RAMSWAROOP MEMORIAL UNIVERSITY

End Semester Examination (2021-22)-Odd Semester

B.Tech (CSE) / B.Tech CSE(Cloud Computing)/(Data Science and Artificial Intelligence) I Year – I (Sem)	
Course Name: Python + Clean Coding	Code: BCS1702
Time: 02 Hours	Max Marks: 60

University Roll No.													
	(To be filled by the Student)												

Note: Please read instructions carefully:

a) The question paper has 03 sections and it is compulsory to attempt all sections.

b) All questions of Section A are compulsory; questions in Section B and C contain choice.

Section A: Very Short Answer type Questions Attempt all the questions.		BL	CLO	Marks (10)
1.	What is .csv file and how to import it using pandas?	BL1	CLO1	02
2.	Illustrate the term Machine Learning and its importance in real world.	BL2	CLO2	02
3.	Explain the need of a dictionary with appropriate example.	BL2	CLO2	02
4.	List the methods that return the first 4 and last 6 rows of a Data Frame.	BL1	CLO3	02
5.	Explain Categorical data in pandas with appropriate example.	BL2	CLO2	02
Section B: Short Answer Type Questions **Attempt any 03 out of 06 questions.**		**BL**	**CLO**	**Marks (30)**
1.	Define the use of Function in Python with appropriate example.	BL1	CLO2	10
2.	Explain the concept of List Comprehension in Python with appropriate example.	BL2	CLO4	10
3.	Build a Program to check if first and last number of a list is the same.	BL3	CLO4	10
4.	Explain Python dictionary and apply the following methods- a. items() b. Update()	BL2	CLO1	10
5.	Construct a Python Program to Print Multiplication table of given number entered by user.	BL3	CLO3	10
6.	Describe outliers and missing values in a Dataset? Explain the methods of imputing missing values.	BL2	CLO3	10

Section C: Long Answer Type Questions Attempt any 01 out of 04 questions.	BL	CLO	Marks (20)
1. Explain List, Tuple, Set and Dictionary with appropriate example and provide at least one instance where each of these collection types can be used.	BL5	CLO4	20
2. Explain List in Python and apply the following methods- a. Append() b. Insert() c. Index() d. Count() e. Sort()	BL5	CLO4	20
3. Construct an outer function that will accept three parameters a,b and c Create an inner function inside an outer function that will calculate the multiplication of a,b and c and atlast the outer function will add 25 in result and return it.	BL6	CLO3	20
4. Explain different types of Supervised Machine Learning Algorithms and Compare between Random Forest and Decision Tree.	BL5	CLO3	20