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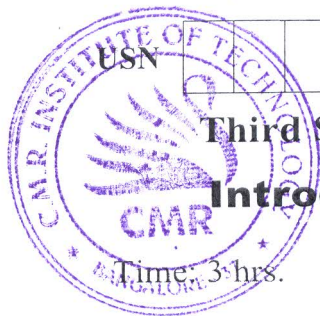
USN

Third Semester MBA Degree Examination, Dec.2023/Jan.2024
Introduction to Python, Data and Control Systems

Time: 3 hrs.   Max. Marks: 100

Note: 1. Answer any FOUR full questions from Q1 to Q7.
2. Question No.8 is compulsory.
3. M : Marks , L: Bloom's level , C: Course outcomes.

			M	L	CO
Q.1	a.	Outline the difference between a complier and an interpreter.	03	L2	CO1
	b.	Explain in detail the computer hardware architecture with neat diagram.	07	L2	CO1
	c.	Taking the input from user, develop a python program to calculate the area of a square, triangle and circle.	10	L3	CO2
Q.2	a.	Write a python program to check whether a given number is odd or even.	03	L3	CO2
	b.	Illustrate the concept of conditional execution, alternate execution, chained conditionals and nested conditionals with suitable examples.	07	L2	CO2
	c.	Demonstrate the different types of operators that can be used in python along with their precedence.	10	L3	CO1
Q.3	a.	Justify the statement "String in python are immutable".	03	L4	CO2
	b.	Explain break and continue statements with examples in python.	07	L2	CO1
	c.	Assume a string of first ten letters of English alphabet; using slice operation perform the following : i) Print the first three letters from the list ii) Print any three letters from the middle iii) Print he letters from 5th letter to the end of the list.	10	L3	CO2
Q.4	a.	What is a function? Demonstrate how to use the function in python programs.	03	L2	CO3
	b.	Explain fruitful functions and void functions with examples.	07	L2	CO3
	c.	Identify the different built in functions in python and their importance.	10	L3	CO3
Q.5	a.	Compare the local and global scope of variables in python.	03	L2	CO3
	b.	Critique the importance of indentation in python and show how if affects the program execution.	07	L2	CO3
	c.	Elaborate the different string handling methods with examples.	10	L2	CO3
Q.6	a.	Explain how arrays are different from lists in python.	03	L2	CO4
	b.	Summarize the key properties of a file and explain in detail file reading and writing process with an example of python program.	07	L2	CO5
	c.	Explain list in python with syntax and illustrate the methods append( ), insert() and remove( ) with examples.	10	L2	CO4

Q.7	a.	Making use of python dictionary, explain the use of IN operator.	03	L2	CO4
	b.	Use the date time module to build a program that gets the current date and prints that day of the week.	07	L3	CO4
	c.	Evaluate the following expressions and determine the output : 2**4 20 % 7 25 // 6 x = (100 + 5 * 3) y = (5 + 4 – 7 + 3).	10	L2	CO1
Q.8		Summarize the following with examples :	20	L2	CO4
	a.	Parameters and arguments			
	b.	Datatypes			
	c.	Packages in python			
	d.	Tuples in python			

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