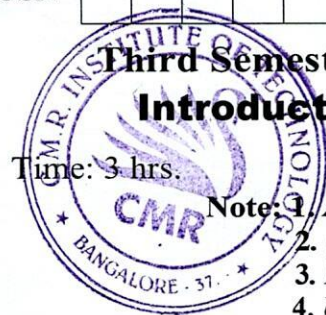


USN

22MBABA303



Third Semester MBA Degree Examination, Dec.2024/Jan.2025

Introduction to Python, Data and Control Systems

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.

2. Question No. 8 is compulsory.

3. M : Marks, L: Bloom's level, C: Course outcomes.

4. Use of PV (A₁ to A₄) Table permitted.

			M	L	C
Q.1	a.	Explain about "creativity and Innovation" in python.	3	L1	CO2
	b.	Explain about "order of operations" in python.	7	L1	CO2
	c.	Explain "Python Data Types".	10	L1	CO2
Q.2	a.	State "Parameters and Arguments" with suitable example.	3	L1	CO1
	b.	Explain "Python Debugging".	7	L2	CO1
	c.	Explain "Computer Hardware Architecture".	10	L2	CO1
Q.3	a.	State syntax of "If else" statement.	3	L1	CO2
	b.	Explain various types of string methods and what they do.	7	L2	CO3
	c.	Explain Chained conditional statements in python.	10	L2	CO3
Q.4	a.	State the working of python break statement.	3	L1	CO2
	b.	Explain "Comparison operators" in python.	7	L2	CO1
	c.	Explain "string slices" and "strings are immutable".	10	L2	CO3
Q.5	a.	State python Tuple with an example.	3	L1	CO4
	b.	Explain the various "List operations" in python.	7	L2	CO4
	c.	Explain the various "Type of Errors".	10	L2	CO5
Q.6	a.	State python string with an example.	3	L1	CO3
	b.	"Tuples are immutable". Explain.	7	L3	CO4
	c.	Explain the "Dictionary Operation" in python.	10	L2	CO4

Q.7	a.	State python Dictionary with an example.	3	L1	CO4
	b.	Explain python exception Handling using "Try" statement.	7	L2	CO5
	c.	List the different packages you are familiar with write a brief note on the determine package in python.	10	L2	CO5
Q.8		(Compulsory) Case Study	10	L2	CO3
	a.	Develop a python code to solve quadratic equation by importing "sqrt" form "math". The formula is given below : $\text{Sol 1} = -b + \sqrt{\frac{b^2 - 4ac}{2a}} ; \text{Sol 2} = \sqrt{\frac{b^2 - 4ac}{2a}}$			
	b.	Develop a python code to find the area of a triangle given three sides 'a' 'b' and 'c' as per the following formulae. $S = \frac{a+b+c}{2}$ $\text{Area} = s(s-a)(s-b)(s-c)$	10	L3	CO2
