



Third Semester MBA Degree Examination, June/July 2024
Introduction to Python Data and Control Systems

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.

			M	L	C
Q.1	a.	Using simple print statement in python write a program to print your details like name, USN, department, college, Sem.	3	L1	CO2
	b.	Enumerate and elucidate the distinctive features that contribute to the popularity and versatility of python language.	7	L1	CO1
	c.	Draw a neat functional block diagram of a computer system and explain the key components and their inter actions.	10	L2	CO1
Q.2	a.	Apply precedence rules to the given expression and determine the output $Z = 3 + 800/2 **3 - (8 + 2)$	3	L1	CO1
	b.	Apply the following terminologies used in computer programming, providing concise definition and examples. i) Variable ii) Algorithm iii) Keyword iv) Debugging.	7	L2	CO1
	c.	Describe the fundamental types of operators in python, specifically focusing on i) Arithmetic ii) Relational iii) Logical operator. Provide a comprehensive explanation for each types with suitable example.	10	L1	CO1
Q.3	a.	Write a python program to print odd numbers between 1 to 10.	3	L3	CO2
	b.	With suitable python syntax and example, explain the following statements. i) break ii) continue.	7	L2	CO1
	c.	Explain looping control statement in python with syntax and example.	10	L2	CO1
Q.4	a.	Explain with suitable example fruitful function in python.	3	L1	CO3
	b.	Discuss string handling methods in python with examples.	7	L2	CO4
	c.	Discuss the benefits offered by functions in python with suitable example.	10	L2	CO3
Q.5	a.	Write a pythod code to create and display. i) List ii) tuple iii) dictionary.	3	L1	CO2
	b.	Explain the concept of list slicing and indexing in python with suitable examples.	7	L2	CO2

	c.	Distinguish between list aliasing and list cloning in python, providing examples to illustrate the contrast.	10	L2	CO4
Q.6	a.	Write the output of the following python code str = "PYTHON" print (str[-1]) print (str[-2 :]) print (str [-5 : -2])	3	L3	CO4
	b.	Write a python program to create an array of 5 integers and display the array items. Access individual elements through indexes.	7	L3	CO2
	c.	Develop a python program to perform the following operations on a file. i) Open a file ii) Read and print file contents iii) Write a line to a file.	10	L3	CO2
Q.7	a.	Explain the difference between syntax error and logical error in python.	3	L2	CO1
	b.	Describe the procedure for creating python packages and elucidate the advantages of utilizing python packages.	7	L2	CO5
	c.	Demonstrate exception handling in python with suitable examples.	10	L2	CO1
Q.8	a.	Explain the rules and conventions for naming variables in python.	5	L1	CO1
	b.	Write a python program to find the area of a triangle. Note : area = $\frac{1}{2} \times \text{breadth} \times \text{height}$	5	L2	CO2
	c.	Explain different ways to delete an element from a list with suitable python syntax and programming examples.	10	L2	CO4

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