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Internal Assessment Question Paper – 1
Ramaiah Institute of Technology
(Autonomous Institute, Affiliated to VTU)
Department of CSE

Programme: B.E
Course : Introduction to Python Programming
CIE: 1   Sem:1
Max Marks: 30   Time: 1Hr

Term: 31.10.2022-10.03.2023
Course Code : PLC142
Section:1-6 Date:23/01/23
Portions for Test: L1 – L11

Instructions to Candidates:
1. **Question No. 1 is Mandatory**
2. Answer any one question from Question No. 2 or 3. Each Question carries 15M.
3. Mobiles, smart watches or any electronic gadgets are strictly banned.

Sl#		Question	Marks	Bloom's Level	CO Mapping
1a	i.	For num = [10,30,20,40], what does the following for loop output? for k in num: print(k) (a) 10 20 30 40 (b) 10 30 20 40 (c) 10 30 20	5	L3	CO2
	ii.	For num = [10, 30, 20, 40], what does the following for loop output? for k in range(1, 4): print(num[k]) (a) 10 30 20 40 (b) 30 20 40 (c) 10 30 20			
	iii.	For fruit = 'strawberry', what does the following for loop output? for k in range(0, len(fruit), 2): print(fruit[k], end='') (a) srwer(b) tabry			
	iv.	For num= [12, 4, 11, 23, 18, 41, 27], what is the value of k when the while loop terminates? k = 0 while k <len(num) and num[k] ! = 18: k = k + 1 (a) 3 (b) 4 (c) 5			
	v.	For fruit = [25,35,45,55], use a list operation to change thelist to [25,35,55]			
b.		List out the features of Python Programming language.	5	L1	CO1
c		What are modules? Explain math module with example.	5	L2	CO3

	2 OR 3			
2a	What are dictionaries in python? Write a python program that makes a dictionary whose keys are the words 'one', 'two', 'three' and 'four' and whose corresponding values are the numerical equivalents, 1, 2, 3 and 4(ints not strings)	5	L2	CO2
b	What is Tuple in python? Explain tuple packing and unpacking with an example code snippet.	5	L2	CO2
c	What are membership and identity Operators in python? Explain both Operators each with relevant examples.	5	L2	CO1

3a	a) Give the exact results of each of the following division operations.
	  (a) 7 / 4 (b) 7 // 4
	b) What value does the following expression evaluate to?
	  2 + 9 * ((3 * 12) – 8) / 10
	  (a) 27 (b) 27.2 (c) 30.8
	c) Write a python function to implement the Collatz 3n+ 1 sequence .
		5	L2	CO1

b	What is debugging? Give an example for each type of error that occur in programs.	5	L1	CO1

c	What is a list in python? Explain each of the following w.r.t lists with an appropriate example:
	  • Slicing
	  • 2 built-in list methods
		5	L2	CO2

Course Outcomes meant to be assessed by the IA Test1:
CO1:Demonstrate proficiency in handling loops and creation of functions.
CO2:Identify the methods to create and manipulate lists, tuples and dictionaries.
CO3: Develop programs using modules and files.