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RV COLLEGE OF ENGINEERING®
(An Autonomous Institution affiliated to VTU)
I Semester B. E. Regular / Supplementary Examinations Feb/Mar-2025
INTRODUCTION TO PYTHON PROGRAMMING (Elective)

Time: 03 Hours

Maximum Marks: 100

Instructions to candidates:

1. Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
2. Answer SIX full questions from Part B. In Part B question number 2 and 11 are compulsory. Answer any one full question from 3 and 4, 5 and 6, 7 and 8 & 9 and 10.

PART A

			M	BT	CO
1	1.1	Identify the output of the following statement? $X = "RVCE"$ $Print(x**3)$	01	1	1
	1.2	What is the result of the expression $10 \ll 1$?	01	1	2
	1.3	Compare / and // operators in python.	01	2	2
	1.4	Identify the type of Exception generated by the following code $list = [10, 20, 30, 40, 50]$ $print(list[5])$	01	2	1
	1.5	Write an example for Name Error Exception in Python?	01	2	2
	1.6	What is the output of following code: $thislist = ["APPLE", "ORANGE", "CHERRY"]$ $print(thislist[-1])$	01	3	1
	1.7	Write an instruction to delete 'YEAR' from given dictionary. $thisdict = \{$ $"brand": "Ford",$ $"model": "Mustang",$ $"year": 1964$ $\}$ $print(thisdict)$	01	3	3
	1.8	What is the output of the following code? $txt = "Hello, welcome to my world."$ $x = txt.index("welcome")$ $print(x)$	01	2	3
	1.9	Give an example of INSERT() and Append () function for the list.	01	2	2
	1.10	What will be the output of below Python code? $str1 = "Information"$ $Print(str1[2:8])$	01	3	2

PART B

2	a	Why is python a powerful and popular language? Justify.	07	2	1
	b	Accept the String from the User and illustrate any 6 String Operations.	07	3	1
3	a	Write a program to generate the following sequence. 0 1 1 2 3 5 8 13 …… N	07	3	3
	b	Write a program to create Simple Calculator using elif statements.	07	3	3

OR

4	a	With syntax, explain the working of break, continue and pass-statements. Write an example for each.	07	3	1
	b	Discuss the usage of Bitwise Operators.	07	3	3
5	a	Discuss the below 'tuple' operations with an example for each: i) concatenation ii) iteration iii) membership iv) repetition	07	3	3
	b	Write a Python program to find the factorial of the given number.	07	3	3
		OR			
6	a	Write a program to create a dictionary with whole integer numbers as values of dictionary and fetch only even values from a given dictionary using for loop.	07	3	2
	b	Given the string "Accountability", apply the suitable inbuilt method to do the following operations and write proper python statements their respective outputs. i) Check whether the string is in title case ii) Extract the substring 'ability' using negative indexing iii) Check whether the string ends with 'ab' or 'ty'	07	2	2
7	a	Discuss the concept of Global variable and Arbitrary Keyboard Arguments in Python.	07	3	2
	b	Discuss Try with else clause in Exception handling with example?	07	3	2
		OR			
8	a	Explain arbitrary Arguments and arbitrary key word arguments, in functions with example.	07	1	4
	b	What is the role of the finally block in exception handling? Provide an example.	07	1	4
9	a	Write python code to create a class Rectangle with attributes width the height. Add a method calculate area to calculate the area of the rectangle.	07	2	4
	b	Write a program to illustrate the inheritance in python.	07	3	2
		OR			
10	a	Write a python program to create a base class Shape with a method area. Create two subclasses Circle and Square that inherit from Shape and calculate and print their respective areas.	07	2	1
	b	Discuss Static and Class Methods.	07	3	4
		Laboratory Component			
11	a	Write a program to Implement Set and Tuple operations.	10	3	4
	b	Write a program to Read the paragraph from the user, and count the number of words, frequency of words and search for specific word.	10	3	4