Register Number:……..

KUMARAGURU
college of technology
character is life

B.E/B.TECH DEGREE EXAMINATIONS: APRIL / MAY 2023

(Regulation 2018)

Second Semester

COMMON TO ALL BRANCHES EXCEPT AI&DS

U18CSI2201**:** Python Programming

COURSE OUTCOMES

CO1: Classify and make use of python programming elements to solve and debug simple logical problems.

CO2: Experiment with the various control statements in Python.

CO3: Develop Python programs using functions and strings.

CO4: Analyze a problem and use appropriate data structures to solve it.

CO5: Develop python programs to implement various file operations and exception handling.

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	Mention the use of operator precedence.	CO1	[K_2]
2.	Write the difference between '/' and '//' in Python division.	CO1	[K_2]
3.	Write a Python program compute the cube of a number using lambda function.	CO2	[K_2]
4.	Outline the use of 'pass' statement in Python	CO2	[K_2]
5.	Write a Python program that asks the user for a long string containing multiple words. Print back to the user the same string, except with the words in backwards order.	CO3	[K_2]

Input	Output
My name is Rajesh	Rajesh is name My

6.	Write a program to print the list after removing even numbers in [5,6,77,45,22,12,24].	CO3	[K_2]
7.	Compare list with tuple.	CO4	[K_2]
8.	You have a record of students. Each record contains the student's name, and their percent marks in Maths, Physics and Chemistry. The marks can be floating values. The user enters some integer followed by the names and marks for students. You are required to save the record in a dictionary data type. The user then enters a student's name. Output the average percentage marks obtained by that student, correct to two decimal places.	CO4	[K_3]

9.		Write a Python program to check whether the file exists in a directory.		CO5	[K_2]
10.		Write the use of format operator in Python.		CO5	[K_1]

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.	a)	Write a brief note on Python data types and expressions with example code.	10	CO1	[K_2]
	b)	Write a Python program to convert temperatures to and from Celsius, Fahrenheit.	6	CO1	[K_3]
12.	a)	Explain in detail about looping statements, break and continue statement in Python with code	10	CO2	[K_2]
	b)	Write the Program to reverse the digits of a given number.	6	CO2	[K_2]
13.	a)	Briefly explain about string functions in Python with example code.	8	CO3	[K_2]
	b)	Write a program to remove duplicates from the list using suitable data structure in Python.	8	CO3	[K_3]
14.	a)	Write a Python program using recursion to implement binary search approach.	6	CO3	[K_3]
	b)	Consider the list of positive numbers. It is needed to rearrange list such that even numbers at even position and odd numbers at odd positions. If odd numbers exceed the even numbers or vice-versa, keep them untouched. Write the Python program to solve this problem. Input : [2, 5, 7, 8, 1, 6, 9] Output : [2, 5, 8, 7, 6, 1, 9]	10	CO3	[K_3]
15.	a)	Explain about the operations on Tuples in Python.	8	CO4	[K_2]
	b)	Write a Python program to record the number of occurrence of each word in a line of text and print the same Input : LEARNING PYTHON IS AWESOME. PYTHON IS EASY Output: LEARNING:1, PYTHON:2, IS:2, AWESOME:2, EASY:2	8	CO4	[K_3]
16.	a)	Write about exception handling mechanism in Python.	10	CO5	[K_2]
	b)	Write a Python program for solving the following problems: i. Find the longest word in a file ii. Remove newline characters from a file.	6	CO5	[K_3]

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