Register Number:……..

KUMARAGURU
college of technology
character is life

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

(Regulation 2018)

Fourth Semester

COMMON TO ALL BRANCHES

U18MAR0202**:** Python Programming

COURSE OUTCOMES

CO1: Solving problems using the data structures in python programming.

CO2: Handling data for data pre-processing.

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

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

1.	What is the order of precedence of the following operators in python? i) Parentheses ii) Exponential iii) Multiplication iv) Division v) Addition vi) Subtraction	CO1	[K_2]
2.	Predict the output for the following expressions: a. 22%3 b. 3*1**3	CO1	[K_3]

3.	The following code contains an infinite loop. State the reason.
	n = 10
	answer = 1
	while n > 0:
	  answer = answer + n
	  n = n + 1
	print(answer)
		CO1	[K_3]

4.	When is the break and continue statements used in Python?	CO1	[K_2]
5.	Compare tuples and list data structures.	CO1	[K_2]
6.	How is polynomial represented using dictionaries?	CO1	[K_2]
7.	If list1=[6,23,3,2,0,9,8,75], write a Python code to get the output [23,2,9,75] from list1.	CO2	[K_3]

8.		Given a NumPy array [1,2,3,4,5,6,7], Write a python code to slice from the index 3 from the end to the index 1 from the end.		CO2	[K3]
9.		What are the applications of seek () function in Python?		CO1	[K2]
10.		What is a data frame in Pandas?		CO1	[K2]

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

11.	a)	Write a python function to read a string and display the total number of uppercase and lowercase letters.	8	CO1	[K3]
	b)	Explain the membership and identity operators with a suitable example.	8	CO1	[K2]
12.	a)	Write a Python program to display Fibonacci sequence for n terms.	8	CO1	[K3]
	b)	Write notes on: Lambda functions	8	CO1	[K2]
13.	a)	Discuss any 4 built in functions in sets.	8	CO1	[K2]
	b)	Write a function reverse_number () to return the reverse of the number entered. Example: Sample Input:1234 Sample Output:4321	8	CO1	[K3]
14.	a)	Given two lists. Write a Python code to join them. Write the code for any 4 ways to join with suitable illustration. listOne = ['a', 'b', 'c', 'd'] listTwo = ['e', 'f', 'g']	8	CO2	[K3]
	b)	Explain the count() and index() methods in tuples with suitable examples.	8	CO1	[K2]
15.		How to handle missing values in Pandas? Discuss	16	CO2	[K2]
16.	a)	Explain the file operations in Python Programming.	8	CO2	[K2]
	b)	Write a NumPy program to compute the mean, standard deviation, and variance of a given array along the second axis.	8	CO2	[K3]

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