SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA

B. Tech. (CSE) Minor-II Examination (Even Semester) 2023-24

Entry No: | | | | | | | | | |

Total Number of Pages: [1]

Date: 15th April, 2024

Total Number of Questions: [5]

Course Title: Programming Using Python

Course Code: CSL DC102

Time Allowed: 1 Hour (10:45 to 11:45AM) **Max Marks: [20]**

Instructions / NOTE

i. Attempt All Questions.

ii. Support your answer with neat freehand sketches/diagrams, wherever appropriate.

iii. Assume an appropriate data / information, wherever necessary / missing.

Section – A

Q1.	*Answer the following statement as True or False.* (i) Comparing two lists of different lengths will result in an error. ***True/False*** (ii) The remove() method deletes an element at a specified index from a list. ***True/False*** (iii) If a list in Python contains multiple identical items and you try to convert it to a set, the program will crash. ***True/False*** (iv) If you try to access a key that does not exist in a dictionary, Python will return None. ***True/False*** (v) The symmetric difference of two sets in Python can also be expressed as the union of the two sets, minus their intersection. ***True/False*** (vi) When iterating over a dictionary using a for loop, the loop variable refers to the keys of the dictionary. ***True/False***	[03]	CO1
Q2.	(i) Assuming myLst = ["Basil", "Kookie", "KitKat", "Grey"], what does the expression myLst[:-2] evaluate to? A. ["Basil, "Kookie"] B. ["Basil, "Kookie", "KitKat"] C. ["Kookie, "KitKat", "Grey"] D. Error (ii) What is the difference between the .find() and .index() methods in Python? A. .find() works only on strings and returns -1 if the specified element is not found, while .index() works on strings and lists but raises an error if the specified element is not found. B. .find() only works on lists, and .index() only works on strings, but both return -1 if the specified element is not found. C. .find() and .index() are interchangeable methods, and there is no significant difference between them. D. .find() works on strings and lists, while .index() works only on strings, but both raise an error if the specified element is not found. (iii) What will happen if you try to convert a dictionary into a list using list()? A. An error is raised. B. It will create a list of the dictionary's keys. C. It will create a list of the dictionary's values. D. It will create a list of the dictionary's key-value pairs as tuples. (iv) Assuming set1 and set2 are both sets, how can you obtain a set containing only the elements present in one (not both)? A. set1.difference(set2).union(set2.difference(set1)) B. set1.symmetric_difference(set2) C. set1.union(set2).difference(set1.intersection(set2)) D. set1.difference(set2).union(set2 - set1) E. All of the above. F. A and C.	[04]	CO1

Section – B

Q3.	Find the output of the following Python code: (i)	[08]	CO2

```
L1 = [500,800,600,200,900]
START = 1
SUM = 0
for C in range(START,4):
    SUM = SUM + L1[C]
    print(C,":",SUM)
    SUM = SUM + L1[0]*10
    print(SUM)
```

(ii)

```
s = "Smvdu123!"
result = ""
for char in s:
    if char in str(not s):
        result += "B"
    elif char.isalpha():
        result += char.upper()
    elif char.isdigit():
        result += str(int(char) + 5)
    else:
        result += char
print(result)
```

(iii)

```
def ChangeList():
    L=[]
    L1=[]
    L2=[]
    for i in range(1,10):
            L.append(i)
    for i in range(10,1,-2):
            L1.append(i)
    for i in range(len(L1)):
            L2.append(L1[i]+L[i])
    L2.append(len(L)-len(L1))
    print(L2)
ChangeList()
```

(iv)

```
s = "oompaLoompa"
result = (s[-len(s):-len(s)+5] + " " + s[-6:])
print(result)
```

Q4.	(i) List one similarity and one difference between List and Dictionary datatype. (ii) Write the definition of a function COUNTNOW(PLACES) to find and display those place names, in which there are more than 7 characters. For example: If the list PLACES contains ["SYDNEY","TOKYO","PINKCITY","BEIJING","SUNCITY"] The following should get displayed : PINKCITY	[04]	CO3
Q5.	Describe the difference between **import library** and **from library import *** when used in a python program. Here library is some python library.	[01]	CO3

Course Outcomes

CO1. Know the basic syntax and Data Structures in Python.
CO2. Think and Design solution in Object Oriented way as well as Procedural way.
CO3. Enjoy coding and compete at online programming sites like CodeChef, HackerEarth etc.

CO	Questions Mapping	Total Marks	Total Number of Students (to be appeared in Exam)
CO1	Q1,Q2	07	120
CO2	Q3	08	120
CO3	Q4, Q5	05	120