Total No. of Questions – [4]

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G.R./PRNNo.	

PAPER CODE	U112-202B/RE-Backlog

DECEMBER 2022 (INSEM+ ENDSEM) EXAM

F.Y. B. TECH. (SEMESTER - I)

COURSE NAME: PYTHON FOR ENGINEERS

COURSE CODE: CS10202B

(PATTERN 2020)

Time: [2Hr] [Max. Marks: 60]

(*) Instructions to candidates:

1) Figures to the right indicate full marks.
2) Use of scientific calculator is allowed
3) Use suitable data where ever required

Question No.	Question Description	Marks	CO mapped	Blooms Taxonomy Level
Q.1	i. What will be the output of the following Python code? numbers = [13, 5,"A", 7.7,33] numbers.sort(reverse=True) print('Reversed List:',numbers) a)Reversed List: ["A",33, 13, 7.7, 5] b)TypeError c) AttributeError d) NameError	[2]	CO1	A
	ii. What will be the output of given Python code? S='PythonPythonPYTHON' print(S[-2:-16:-2]) a) OTPotPo b) HYnhyn c) OYoyo d) HPhPh	[2]	CO1	A
	iii. What is the output of the following code l1 = [23, 32, 4, 5, 2, 12, 23, 7, 9, 10, 23,23] print(l1[l1.count(32)-6]) print(l1.count(l1[6])-len(l1)) a) 7 c) -7 -8 -8 b) 7 d) -7 8 8	[2]	CO1	A
	iv. What will be the output of the following Python code?	[2]	CO1	A

	l2=[19,20,3.3,4.5,"XYZ",50] l2.insert(1,[11,13]) print(l2) a) [19, 20, [11,13], 3.3, 4.4, 'xyz', 50] b) [19,[11,13],20,3.3,4.5,'XYZ',50] c) [[19, (11, 13),20, 3.3, 4.4, 'xyz', 50] d) [19, 20,(11, 13), 3.3, 4.4, 'xyz', 50]			
	v. What is the output of the following? A=60 print(A>>3) a)7 b)15 c) Invalid Operation d) 30	[2]	CO1	A
	vi. Which of the following will give " Kiran" as output? str1="Ritu,Kiran,Aryan" a) print(str1[-7:-12]) b) print(str1[-11:-7]) c) print(str1[-11:-6]) d) print(str1[-7:-11])	[2]	CO1	A
	vii. What will be the output of the following Python code? list(range(5, 5, -2)) list(range(10, 5, -2)) a) [ ] b) [10, 8, 6] c) [] [10, 8, 6] d) None of the mentioned	[2]	CO1	A
	viii. Select the correct output of the following String operations str1 = "my isnameisisisisjameisisis bond"; sub = "is"; print(str1.count(sub, 5)) a) 5 b) 7 c) 6 d) 10	[2]	CO1	A
	ix. Select which true for Python function 1. A function is a code block that only executes when it is called. 2. Python function always returns a value. 3. A function only executes when it is called and we can reuse it in a program 4. Python doesn't support nested function a) 1,2,3 b) 2,3,4 c) 4 d)2	[2]	CO2	A
	x. A while loop in Python is used for what type of iteration? a)Indefinite b) discriminant c)definite d)indeterminate	[2]	CO2	A
	xi. What is the output of the following a= [1.1, 12, 1.3, 14, 1.5] for i in range(1, 5): a[i-1] = a[i]	[2]	CO2	A

	for i in range(0, 5): print(a[i],end = " ") a) 1.5 1.5 14 12 1.3 b)12 1.3 1.5 14 1.5 c) 1.5 1.5 14 1.3 12 d) 12 1.3 14 1.5 1.5			

	xii. What will be the output of the following Python code?
	for num in range(1, 10):
	for i in range(2, num):
	if num%i == 3:
	print(num,end=" ")
	break
	a) [7, 8, 9] b) (7, 8, 9)
	c) 7 8 9 d) None of the mentioned
		[2]	CO2	A

	xiii. What will be the output of the following Python code?
	i = 0
	while i < 5:
	i += 1
	print(i,end=" ")
	if i < 3:
	break
	else:
	pass
	
	a) 1 2 3 b) 1 ,2,3 c) 1 d) TypeError
		[2]	CO2	A

	xiv. What will be the output of the following Python code? min=lambda a,b:a if a == b else b min(12*12,10*21) a) 210 b) 144 c) 114 d) None of the mentioned	[2]	CO2	A

	xv. Select the correct output of the following String operations
	str1="Pytthon"
	c=0
	for x in str1:
	if(x!="t"):
	c=c+1
	else:
	pass
	print(c)
	
	a)4 b) 5 c) 7 d)6
		[2]	CO2	A

Q2	Solve any three out of four a. Describe Pyplot in matplotlib module and describe subplot? Write a python code to plot sin wave and cosine wave signal over the period (0,3*pi,0.2) in vertical subplot	[5]	CO3	A
	b. Reshape the given input to 2 rows and 2 columns and Write a python code to get addition of all elements, row wise and column wise in a numpy array? Input: [24, 25, 23, 27] Expected Output 1: Result=99 Expected Output 2: Result= 47	[5]	CO3	A
	c. Write a NumPy program to a)compute numerical negative value for all elements and b) to compute an	[5]	CO3	A

	element-wise indication of the sign for all elements in given array Input: Original Array= [10 11 -12 13 -14] Expected Output: a) [-10 -11 12 -13 14] Expected Output: b) [1 1 -1 1 -1]			
	d. Differentiate between Python list and NumPy array? A1=[[11,22,33],[11,22,33]] A2 =[11,22,33] Justify (A1+A2) Output with the help of broadcasting rules	[5]	CO3	A
Q.3	Solve any three out of four Input:Refer this paragraph for question b,c,d. Keep smiling, because life is a beautiful thing and there's so much to smile about. Love the life you live. Life is a long lesson in humility. Life is what happens when you're busy making other plans. Whoever is happy will make others happy too. Tell me and I forget. Teach me and I remember. Involve me and I learn			
	a. Describe working of readline(),write(),split(),tell() and seek() function in file handling with example .	[5]	CO4	U
	b.Write a user defined function Odd_Lines() to display even number lines from the text file. Consider file name as – Textdata.txt.	[5]	CO4	A
	c. Write a function count_the() to count and display the total number of the from the file. Consider file name as – Textdata.txt.	[5]	CO4	A

	d. Consider following lines for the file data.txt and predict the output:
	
	Program:
	`file1 = open("data.txt")`
	`l1 = file1.readline(12)`
	`print("\n",file1.readline())`
	`ch3=file1.read(11)`
	`print(l1)`
	`print(file1.readline())`
	`print(ch3)`
	`file1.close()`
		[5]	CO4	A