

KADI SARVA VISHWAVIDHYALAYA

B.E. Semester VI (CE/IT)

CE 505 / IT 505 Python

Mid Semester Examination – February - 2018

Date: 28/02/18

Max. Marks: 30

Time: 1.30 Hrs

Instruction: (1) Use of Scientific calculator is permitted.

(2) All questions are Compulsory.

(3) Figure to the right indicates full marks.

Q. I	Give output of following code.	
1.	<pre>def addone(country): if country in country_counter: country_counter[country] += 1 else: country_counter[country] = 1 addone('China') addone('Japan') addone('china') print (len(country_counter))</pre>	[2]
2.	<pre>print filter(lambda x : x + 10 , range(0,reduce(lambda x , y : x * y , range(0,15))))</pre>	[2]
3.	<pre>numberGames = {} numberGames[(1,2,4)] = 8 numberGames[(4,2,1)] = 10 numberGames[(1,2)] = 12 print numberGames sum = 0 for k in numberGames: sum += numberGames[k] print(len(numberGames) + sum)</pre>	[2]
4.	<pre>tuple1, tuple2 = (123, 'xyz'),(456, 'abc') print cmp(tuple1, tuple2); print cmp(tuple2, tuple1);</pre>	[2]
5.	<pre>s1 = set([3, 6, 7, 9,11]) s2 = set([6,3,10,7]) s3 = set([7, 9, 10, 11]) print s1.isdisjoint(set.intersection(s1, s2, s3))</pre>	[2]

	6.	l = [1, 2, 3] check = [[[0] * 4] * 2] * 2 check[0][1][0] = 2 print check l[: len(l) - 1] = check print l	[2]
	7.	aList = [123, 'xyz', 'zara','safe','xyz', 'abc']; print "A List : ", aList.pop() print "B List : ", aList.pop(2) aList.remove(aList.pop(1)); print "List : ", aList	[2]
	8.	seq=['1a','2b','3','4','5'] j = "000".join(seq) print j	[2]
	9.	print type (lambda: none)	[1]
	10.	text = "Python is easy to learn." result = text.endswith('Python is easy to learn') print result	[1]
Q. II		Find out error(s) if any in the following code and correct it. Also give the output	
	1.	list1 = ['bread', 'milk', 'butter'] list2=[] for value,index in enumerate(list1): list2.append([value]) list2[0] = false print list1, list2	[2]
	2.	t = (123,'xyz','zara','abc'), (456, 700, 200) , tuple1, tuple2 = t print "min value element : ", min(tuple1); print "min value element : ", min(tuple2); tup = ('physics', 'chemistry', 1997, 2000); print tup del tup; print "After deleting tup : " ,tup	[2]
	3.	values = [[3, 4, 5, 1], [33, 6, 1, 2], "12"] v = values[0][0] for row in range(0, len(values)): for column in range(0, len(values[row])): if v > values[row][column]: v = values[row][column] print v	[2]

Q. III	Write Python program for the following.	
	<p>1. Ask user to enter the marks for each student, store them in a list and print the second lowest mark.</p> <p>example</p> <p>[1,0,0,1,-1,8] -> 0</p> <p>[5,4,4,4,4,4] -> 5</p> <p>[1,1,5,2,4,1,1,2] -> 2</p> <p>[4,4,4,4,4,4] -> 0</p>	[6]
	OR	
	<p>1. Write a program that accepts a sentence and calculate the number of letters and digits.</p> <p>Suppose the following input is supplied to the program:</p> <p>Hello world! 123</p> <p>Then, the output should be:</p> <p>LETTERS 10</p> <p>DIGITS 3</p>	[6]

KADI SARVA VISHWAVIDHYALAYA

B.E. Semester VI (CE/IT)

CE 505 / IT 505 Python

Mid Semester Examination – April - 2016

Date: 08/04/16

Max. Marks: 30

Time: 1.30 Hrs

Instruction: (1) Use of Scientific calculator is permitted.

(2) All questions are Compulsory.

(3) Figure to the right indicates full marks.

Q. I	Give output of following code.	
1.	<pre>print 10.0/4.0</pre>	[2]
2.	<pre>l = [[0] ,1, 2, 3] l[: (len (l) - 1 * 8)] = [[0,0] *5] print l</pre>	[2]
3.	<pre>l1 = [1, 2, 3, 4] l2 = l1[:] l2.append(5) print l1, l2 l2 = l1[::-2] l2.append(6) print l1, l2</pre>	[2]
4.	<pre>tuple1, tuple2 = (123, 'xyz'),(456, 'abc') print cmp(tuple1, tuple2); print cmp(tuple2, tuple1); tuple3 = tuple1 + tuple2 print tuple3</pre>	[3]
5.	<pre>a = [1, 2, 3, None, (), ['None']] ,] print len(a)</pre>	[2]
6.	<pre>tuple1, tuple2 = (123,'xyz','zara','abc'), (456, 700, 200) print "min value element : ", min(tuple1); print "min value element : ", min(tuple2); tup = ('physics', 'chemistry', 1997, 2000); print tup del tup; print "After deleting tup : "</pre>	[3]
7.	<pre>print filter(lambda x : x + 10 , range(0,reduce(lambda x , y : x * y , range(0,15))))</pre>	[2]
8.	<pre>points = [[1, 2], [3, 1.5], [0.5, 0.5], 'xyZ', 'zara', 'abc', 'Xyz'] points.sort() print(points)</pre>	[2]

	9.	<pre>aList = [123, 'xyz', 'zara','safe','xyz', 'abc']; print "A List : ", aList.pop() print "B List : ", aList.pop(2) aList.remove(aList.pop(1)); print "List : ", aList</pre>	[2]
	10	<pre>d = {"john":40, "peter":45,"abc":1} print str (tuple (list(d.keys())))</pre>	[2]
	11	<pre>s1 = set([3, 6, 7, 9]) s2 = set([6, 7, 9, 10]) s3 = set([7, 9, 10, 11]) print set.intersection(s1, s2, s3)</pre>	[2]
Q. II Write Python program for the following.			
	1.	To create customize exception for checking string length. If string length is more than 6 or less than 2 then customize exception must be thrown.	[6]
		OR	
	1.	Read a text file in python and do following: <ol style="list-style-type: none"> i. print no. of lines ii. print no. of statements iii. print no. of unique words iv. store each word with its occurrence in dictionary 	[6]

KADI SARVA VISHWAVIDHYALAYA

B.E. Semester VI (CE/IT)

CE 505 / IT 505 Python

Re-Re-Mid Semester Examination – April - 2016

Date: 16/04/16

Max. Marks: 30

Time: 1.30 Hrs

Instruction: (1) Use of Scientific calculator is permitted.

(2) All questions are Compulsory.

(3) Figure to the right indicates full marks.

Q. I Give output of following code.

1. `print type(10/4)` [2]
2. `a = [1, "a" , 2 , "b" , "VB" , "JD"]` [2]
`for a[-1] in a:`
`print a[-1] ,`
3. `dif_list = [[0] * 4 for i in range(2)]` [2]
`print dif_list`
4. `l = [1,2,3]` [3]
`l[: (len(l) - 1) + 2 * (len(l) + 2) - (len(l) * 5 - 5)] = [[0] * 3]`
`print l`
5. `a = [1, 2, 3, None, (), ['None'] ,]` [2]
`print len(a)`
6. `str= "Xenesis \r 2015"` [3]
`print str, " len is ", len(str)`
7. `t = (1, (9, 5), 7, 2)` [2]
`a, b, c, d = t`
`print b[1]`
8. `points = [[1, 2], [3, 1.5], [0.5, 0.5]]` [2]
`points.sort()`
`print(points)`
9. `s = set([1,2,3,4,5,6])` [2]
`print s.pop()`
- 10 `values = [[3, 4, 5, 1], [33, 6, 1, 2]]` [2]
`v = values[0][0]`
`for row in range(0, len(values)):`
`for column in range(0, len(values[row])):`
`if v > values[row][column]:`
`v = values[row][column]`
`print v`
- 11 `print filter(lambda x : (x%2) + 4 , range(-10,11))` [2]

Q. II Write Python program for the following.

1. Flatten a nested list structure. **[6]**

Example: if list1 = [1, [2, 3], [4, 5, [6, 7]]] then try to convert it in 1-dimensional [1, 2, 3, 4, 5, 6, 7]

OR

1. Given a list, return a list with the elements "shifted left by one position" so [1, 2, 3] yields [2, 3, 1]. **[6]**

Example:

[1, 2, 3] → [2, 3, 1]

[5, 11, 9] → [11, 9, 5]

[7, 0, 0] → [0, 0, 7]

KADI SARVA VISHWAVIDHYALAYA

B.E. Semester VI (CE/IT)

CE 505 / IT 505 Python

Mid Semester Examination – February - 2015

Date: /02/15

Max. Marks: 30

Time: 1.30 Hrs

Instruction: (1) Use of Scientific calculator is permitted.

(2) All questions are Compulsory.

(3) Figure to the right indicates full marks.

Q. I	Give output of following code.	
1.	<pre>def f(): print s s = "Re-Mid Exam" print s s = "Mid sem" f() print s</pre>	[2]
2.	<pre>print type(10/4)</pre>	[1]
3.	<pre>a = [1, "a" , 2 , "b" , "VB" , "JD"] for a[-1] in a: print a[-1] ,</pre>	[2]
4.	<pre>l = [1,2,3] l[: (len(l) - 1) + 2 * (len(l) + 2) - (len(l) * 5 - 5)] = [[0] * 3] print l</pre>	[2]
5.	<pre>x = "welcome to LDRP-ITR" print x [6 : 2 : -1] print x [-7: -4 : 1]</pre>	[2]
6.	<pre>p=set(["test", "xam", "rem", "practical"]) q=set(["allow", "test", "eval", "rem"]) print p.symmetric_difference(q)</pre>	[1]
7.	<pre>p = ['a','b','c'] q = ['x','y','z'] x2, y2 = zip(*zip(p, q))</pre>	[2]
8.	<pre>dif_list = [[0] * 4 for i in range(2)] print dif_list</pre>	[2]
Q. II	Find out error(s) if any in the following code and correct it.	
1.	<pre>t = (1, 2, 3, (420,), [840, 456]) print t[3] t[4][0] = 420 print t</pre>	[2]

	2.	<pre> developers = set(['Me', 'You', 'JD', 'VB']) developers.remove(['Me']) developers.remove(('YOU')) print developers </pre>	[2]
	3.	<pre> for i in range(0,5): print i," "+"PY",i+1 </pre>	[2]
	4.	<pre> l = [1, [2, [3, 4]], 5] l[1].append(8) print l l[0].extend(["a","v","a"]) print l </pre>	[2]
Q. III		Write Python program for the following.	
	1.	<p>Given a string, find the first appearance of the substring 'not' and 'bad'.</p> <p>If the 'bad' follows the 'not', replace the whole 'not...'bad' substring with 'good'.</p> <p>Return the resulting string.</p> <p>Example :</p> <p>This dinner is not that bad! → This dinner is good!</p> <p>This tea is not hot → This tea is not hot</p> <p>not not bad bad → good bad</p>	[8]
		OR	
	1.	<p>Given a list, return a list with the elements "shifted left by one position" so [1, 2, 3] yields [2, 3, 1].</p> <p>Example:</p> <p>[1, 2, 3] → [2, 3, 1]</p> <p>[5, 11, 9] → [11, 9, 5]</p> <p>[7, 0, 0] → [0, 0, 7]</p>	[4]
	2.	<p>Return the sum of the numbers in the array, returning 0 for an empty array. Except the number 13 is very unlucky, so it does not count and numbers that come immediately after a 13 also do not count.</p> <p>[1, 2, 2, 1] = 6</p> <p>[1, 1] = 2</p> <p>[1, 2, 2, 1, 13] = 6</p> <p>[13, 2, 2, 1, 13] = 3</p>	