Vidyalankar School of Information Technology
SYBScIT Semester III
Subject: *Python Programming*
Faculty Members: *Leena J, Janhavi V, Snehal T, Payal S*

Remedial Questions

Unit - I	
1	Python programs are executed by an interpreter. There are two ways to use the interpreter. What are they?
2	Explain **for loop** in Python with an example code to print Fibonacci series up to 10 terms.
3	Explain features of Python programming language.
4	Explain nested if statement with syntax. WAP to find the largest number among three.
5	How to use control statements in Python.
6	List the different operators in python. Explain in detail
7	A triple of numbers (a,b,c) is called a Pythagorean triple if a * a + b * b = c * c. In this question, you will be given three numbers. You have to output 1 if the three numbers form a Pythagorean triple. Otherwise, you have to output 0. Note that the inputs may not be given in order: you may have to try all possible orderings of the three numbers to determine whether they form a Pythagorean triple
8	Write the output for the following: i) >>> print('a' , 'b' , 'c' , sep = ', ', end=' ') ii) >>> 4 * '-' iii) >>> 'GC' * 0 #This is 'GC' * zero iv) >>> x = 3 >>> 1 < x <= 5 v) >>> 3 < 5 != False vi) >>> 'abc' < 'abcd' vii) >>> 'Jan' in '01 Jan 1838' viii) >>> ' ' in 'abc' ix) >>> ' ' in ' ' x) >>> len(' \' ') >>>len(' it\'s ')
Unit - II	
1	How to define and access the function in python?
2	Explain any 5 string functions with example.
3	What is import? Explain ways of importing in python
4	WAP to counts the number of times the letter appears in string
5	Explain any 5 Math functions with example
6	Write a Python code to check whether the given number is a strong number. Strong Numbers are numbers whose sum of factorial of digits is equal to the original number (Example: 145 = 1! +4! + 5!) .
7	Write the output for the following if the variable **fruit** = '**banana**'

	>>> fruit[:3]
	>>> fruit[3:]
	>>> fruit[3:3]
	>>> fruit[:]

8	Name the following code and explain the same: i) def recurse(): recurse()
Unit - III	
1	What are lists? How to define and access the elements of list.
2	Explain built-in functions and methods of list.
3	Write a short note on tuple operators.
4	Explain different file modes and functions used in python.
5	What is directory? Which methods are available to deal with directories in python.
6	Explain Exception handling block with example.

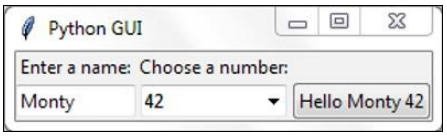
7	i) What is the significant difference between list and dictionary?
	ii) Write a Python code to get the following dictionary as output :
	{1: 1, 3: 9, 5: 25, 7: 49, 9: 81}
	iii) What is the output of the code given below:
	
	>>> squares = {1:1, 2:4, 3:9, 4:16, 5:25}
	>>> print(squares[5])
	>>> print(squares[6])

8	Write the output for the following:
	1) >>> a = [1, 2, 3]
	
	>>> b = [4, 5, 6]
	>>> c = a + b
	>>> print c
	2) >>> [1, 2, 3] * 3
	3) >>> t = ['a', 'b', 'c', 'd', 'e', 'f']

Unit - IV	
1	Explain regular expression in python
2	Define Inheritance. Explain Single inheritance with e.g
3	How to initialize and delete class object.
4	Explain the methods of achieving synchronization of multithreaded programs in Python.
5	Explain different threading functions.
6	Create a module armprime that has two functions, one to check whether the given number is an Armstrong number and the other to check whether the given number is a prime number. Import the above created module in a .py file and show the use of the two functions

	an Armstrong number and the other to check whether the given number is a prime number. Import the above created module in a .py file and show the use of the two functions.

7	Explain the role of the Regular Expressions in the following snippets:
	
	i) >>> p = re.compile('\d+')
	>>> p.findall('12 drummers drumming, 11 pipers piping, 10 lords a-leaping'
	
	ii) >>> p = re.compile('ca+t')
	>>> p.findall('ct cat caaat caaaaaat caaat ctttt cccttt')
	
	iii) >>>p = re.compile('ca*t')
	>>>p.findall('ct cat caaat caaaaaat caaat ctttt cccttt')
	
	iv) >>>p = re.compile('a/{1,3}b')
	>>>p.findall('a/b a//b a///b a/////b ab')
	
	v) >>>result=re.findall(r'\w*','AV is largest Analytics community of India')
	>>>print (result)

8	How is method overriding implemented in Python?
Unit - V	
1	Write a Python code to do the following: i) Create a table STUDENT with columns Id (integer, not null, primary key), RollNo (integer, not null), Name (not null, varchar), Class (not null, varchar) and Grade (not null, varchar) in MySQL and insert 4 rows of data. ii)Retrieve the rows where Grade = 'O'
2	Create a table EMPLOYEE with columns Id (integer, not null, primary key), AdhaarNo (integer, not null), Empname (not null, varchar), Empdept (not null, varchar) and Empage (not null, integer) in MySQL and insert 5 rows of data. ii) Update the respective rows to Empdept = 'ERP' where Empage is >=40.
3	Explain following widgets used in python a)text widget b)button c)label
4	Write a short note on the creation of a scrollbar control in tkinter.
5	Describe the method of enhancing the look and feel of GUI using different appearances of widgets.
6	Write a short note on Listbox widget of tkinter with an example.
7	Write a Python code to create the following GUI: 
8	Write a Python code to create the following menu bar:

Signature of Faculty Members

Name:

1) Leena J
2) Janhavi V
3) Snehal T
4) Payal S

Signature of In-Charge

Name: Pallavi Tawde

Name of Cluster: Software Development