

VAILANKANNI PUBLIC SCHOOL - CBSE

Class: XII

PERIODIC TEST - II (2019-20)

Marks: 50

Subject: Computer Science(083)

SET-I

Time: 2 Hours

Name:	Roll No:	Date:
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General Instructions:

- All questions are compulsory.
- In Question 2(b, d) has internal choices.

Q1:

a. What is function ? How is it useful? (1)

b. From the program code given below, identify the parts mentioned below: (2)

```
def num(x):
    x=50
    return x+3
y=55
res=num(y)
```

Identify these parts:

function header, function call, arguments, parameters, function body, main program

c. Trace the flow of execution for the following program: (1)

```
1. def increment(x):
2.     x=x+1
3.
4. #main
5. x=3
6. print(x)
7. increment(x)
8. print(x)
```

d. What is the different between the formal parameters and actual parameters (1)

e. Predict the output of the following code (3)

<p>(i) <pre>def codo(n): if n == 0: print("Finally") else : print(n) codo(n-3) codo(15)</pre></p>	<p>(ii) <pre>TXT=["20","50","30","40"] CNT=3 Total=0 for c in [7,5,4,6]: t=TXT[CNT] Total=float(t) + c print(Total) CNT-=1</pre></p>	<p>iii) <pre>def upgrade(a,b=2): a=a+b print(a+b) i,j=10,20 upgrade(i,5) upgrade(i)</pre></p>
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f. Write a program using user defined function to : (4)

- i) Calculate and display average of all the elements in a user defined list containing numbers.
- ii) Write a python function that takes two numbers and print the smaller number.
Also write how to call this function.

g. Explain two types of variable scope with example. (1)

h. Write a note on Non- Void Function and Void Function. (2)

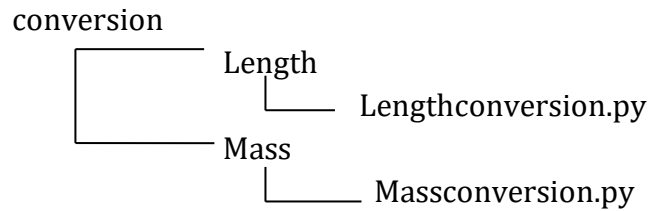
Q2.

a. What is Libraries in Python and How many types of main library use in Python? (2)

b. Create a package Arithmetic Operations(named AO) contain sum, product and difference of two numbers and use it in your main programmer. (2)

(or)

Create a package from above two modules as this:



Make sure that above package meets the requirements of being a Python package. Also ,you should be able to import above package and/or its modules using import command.

c. Write the structure of python Module and define `__init__.py` in a package. (2)

d. Write any two Built-in Functions in Standard Library's (2)

(or)

WAP to get http request information from url www.vpscbssekrishnagiri.com and open it from within your program

e. How are the following two statements different from one another? (2)

(i) `import math` (ii) `from math import *`

Q3.

a. Write a note on `r`, `rb`, `r+` and `w`, `wb`, `w+`. (2)

b. What are the various file opening modes? (1)

c. Write a program to count the words "to" and "the" present in a text file "Poem.txt" (2)

d. Write a program to get roll numbers, names and marks of the students of a class (get from user) and store these details in a file called "Marks.xls" (2)

e. How are following statements different? i) `f.readline()` ii) `f.readline().rstrip()` (2)

f. Write code to print just the last line of a text file "data.txt" (1)

"data.txt" →

```
Line 1 \n
\n
Line 3
Line 4
\n
Line 6
```

Q4.

a. What is recursion ? (1)

b. What does infinite recursion occur? (1)

c. Write a recursive function that computes the sum of numbers 1..n, get the value of last number n from user (2)

d. Write a recursive function to print a string backwards. (2)

e. Describe about Iterative Version with examples. (2)

f. Write a program for Binary searching in an array (a sorted list) (3)

Q5 .

a. 1 What is visualization of Data? How to use Pyplot for it? (1)

d. What is a marker? How can you change the marker type and colour in a plot? (1)

c. Write to create a pie for sequence `con=[23.4,17.5,35,45,50]` for (2)

`Zones=["East", "West", "north", "South", "Central"]`

- **Show North Zone's value exploded**
- **Show % contribution for each zone**
- **The pie chart should be circulat.**