



ANANDALAYA
PERIODIC TEST – 1
Class : XI

Subject: COMPUTER SCIENCE
Date : 18/07/2017

M.M: 40
Time: 2 Hour

Instruction: (1) All questions are compulsory.
(2) Programming language: **Python**.

Q-1 (a) What are data types? What are python's built in data types? (2)

(b) Name the function/method required to : (2)
(i) check if a string contains only lower case letters.
(ii) gives the total length of the string.

(c) Identify and write the name of the module to which the following functions belong: (2)
(1) ceil (2) isupper
(3) sin (4) sqrt

(d) Observe the following Python code very carefully and rewrite it after removing all syntactical errors with each correction underlined. (3)

```
input( " Enter a number: " ) = x :  
if ( abs(x) = x ):  
    print " You Entered a positive number "  
Else :  
    x * = -1  
    print " Number made positive: " x
```

(e) Rewrite the following code in python after removing all syntax error(s). Underline each correction done in the code. (3)

```
Number = INPUT("Enter a Number")  
Sum = 0  
for C in Range ( 1 , Number + 1 ) ;  
    Sum += C  
    print ( " Sum= " )  
print Sum + C  
if ( C > 10)  
    print(" Two digited ", end=' ' )  
else ( C <= 10)  
    print ( " Single digited " )
```

(f) Write the output of the following Python code: (3)

```
a = 12  
b = 7.4  
c = 13  
a -= b  
c=a-b  
print( a , b )  
a *= 2 + c  
print( a , b )  
b += a * c  
a, b, c = c, b, a  
print( b , a )
```

- (g) Find and write the output of the following python code: (2)

```
for Name in ['Jayesh', 'Ramya', 'Taruna', 'Suraj'] :
    print (Name)
    if ( Name[0]== 'T' ):
        break
    else:
        print ('Finished!')
print ('Got it!')
```

- (h) Write the output of the following Python program code: (2)

```
Data=['M','y', ' ','c','i', 't', 'y', ' ','C', 'l', 'e', 'a', 'n', ' ','C', 'i', 't', 'y', ' ',' :']
for i in range(len(Data)-1):
    if (Data[i].isupper()):
        Data[i] = Data[i].lower()
    elif(Data[i].isspace()):
        Data[i]=Data[i+1]
print (Data)
```

- (i) What are the possible outcome(s) executed from the following code? Also specify the maximum and minimum values that can be assigned to variable NUMBER. (2)

```
Import random
STRING = "CBSEONLINE"
NUMBER = random.randint(0,3)
N=9
while (STRING[N]!='L'):
    print(STRING[N] + STRING[NUMBER] + '#', end= ' '),
    NUMBER=NUMBER + 1
    N=N-1
```

- | | |
|--------------|--------------|
| 1. ES#NE#IO# | 2. LE#NO#ON# |
| 3. NS#IE#LO# | 4. EC#NB#IS# |

- Q-2 (a) Write a python program to read students marks in 5 subject display percentage obtained by a student. (4)

- (b) Write a python program to read value of N and display first N Fibonacci numbers. (4)

- (c) Write a python program to read amount invested, rate of interest and time from user and display simple interest. (4)

- (d) Write a program in python to read a value of N, and display sum of Square of first N numbers. For e.g. if value of N is 5 then Program should display : **Sum = 55** (e.g. $Sum = 1^2 + 2^2 + 3^2 + 4^2 + 5^2 = 55$) (4)

- Q-3 A The following code contains an endless loop. Can you find out why and suggest a solution. (3)

```
n =10
answer =1
while ( n > 0):
    answer = answer + n ** 2
    print( answer )
n = n + 1
```