## ATOMIC ENERGY CENTRAL SCHOOL , ANUPURAM <br> WORKSHEET-1 ,Module-1

Sub: Computer Science
Topic : PYTHON LIST
Name: $\qquad$
Total Marks : 25

Class : XII
Date: $\qquad$
Roll No.: $\qquad$
Marks Obtained: $\qquad$

## SECTION A

Answer the following.
(7 $\times 1=7$ )

1. Name an ordered sequence whose value can be modified.
2. What is the length of the sequence $X=[1,2,[6,7,8],[3,9]]$ ?
3. $M=[10,20,30,40,50,60]$

M [ : : 2] results $\qquad$ .
4. $M=[10,20,30,40,50,60]$

M [ : 3] results $\qquad$ .
5. $\mathrm{L}=[10,12,14,16,18,20,22,24]$
$\mathrm{S}=\mathrm{L}[3$ : -3$]$
print(S) displays $\qquad$ .
6. $T=(5,10,15,20,25)$
print(T[: : -2])
7. if $a=[5,4,3,2,2,2,1], E v a l u a t e ~ a[a[a[a[2]+1]]]$

## SECTION B

Answer the following.
(9 $\times 2=18$ )

1. How many types of sequences are supported in Python?
2. What are mutable and immutable types in Python? List both of them.
3. What are list slices? Give examples.
4. Define list in Python.
5. What is nested list? Give an example.
6. How are lists different from other sequential data types?
7. What is the use of negative indexing in slicing? Give example.
8. Give the elements/slices of the following list .
num=[12,23,45,7,55,87,70]
a) num [2]
b) num [-5]
c) num $[2: 4]$
d) num [2:5:3]
e) num [:5]
f) num [::-2]
g) num [-5:-2]
h) num[5:2:-1]
9. Predict the output of the following Python code:
$M=[' p ’$, ' $y$ ' , 't' , 'h' , ' 0 ' , ' $n$ ']
$\mathrm{M}[2: 3]=[$ ]
print(M)
M[2:5]= [ ]
print(M)
