KOTHARI INTERNATIONAL SCHOOL,NOIDA

ANNUAL EXAMINATION, SESSION: 2025-2026

GRADE: 11 SUBJECT: COMPUTER SCIENCE(083)

DAY & DATE: WEDNESDAY, 11 FEBRUARY, 2026

MAXIMUM MARKS: 70 **TIME ALLOWED: 3HOURS**

NAME:_____ **ROLL NO: _____**

General instructions:

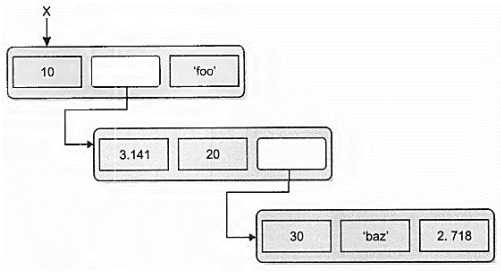
1. *This question paper consists of 4printed pages and 3 questions. It is compulsory to attempt all questions.*
2. *Do not write anything on question paper.*
3. *All the answers must be correctly numbered as in the question paper and written in answer sheet provided to you.*

Q1 **Answer the following** **1x25=25**

1 Consider the following nested list definition and then answer the questions based on this **1+1**

x = [10, [3.141, 20, [30, 'baz', 2.718]], 'foo']

A schematic for this list is shown below:



i. What is the expression that returns the 'z' in 'baz'?
ii. What expression returns the list ['baz', 2.718]

2 Evaluate the following Boolean expressions . **1+1**
(a) 0 and 1 and a and b
(b) not((not b or not a)and c)or a
Given a=False , b=True , c=False as initial values for both the parts

3 Predict the output: **1+1**

```
L=['a','b','c','d','e','f','g']
L[2:3]=[]
print(L)
L[2:5]=[]
print(L)
```

4 Give the output of the code given below : **1**

```
for i in range(4):
    for j in range (5):
        if i+1==j :
          print("+", end='')
        else:
          print("o" , end='')
print()
```

5 What will be the output of the following code : **1**

```
str= "Positive"
for i in range(-1,-len(str),-1):
    print(str[i],end="$")
```

6 Write the output of the following: **1**

```
print("12345".split("#",2))
```

7 Write the output of the following: **1**

```
print('@'.join("PYTHON "))
```

8 Write the output of the following code : **1**

```
L=["Amit","Sumit","Naina"]; print(L+2)
```

9 Write the output of the following : **1**

```
L=["Amit","Sumit","Naina"];L1=["Sumit"];print(L + L1)
```

10 Consider the following code : What will be the output produced if the input is abc **2**

```
string=input("enter string")
count=3
while True :
    if string[0]=='a':
        string=string[2:]
    elif string[-1]=='b':
        string=string[:2]
    else:
        count+=1
        break
print(string)
print(count)
```

11 Suppose that L=["how",["are","you"],["keep ","yourself"],"fit","always", "man","!!"] **1x3=3**
What do the following expressions evaluate to :

a. print("keep" in L[2:3][0])
b. print(L[3:4]+L[1:2])
c. print(L[1]+L[2])

12 Predict the output : **1x3=3**

```
x=(1,(2,(3,(4,))))
print(len(x))
print(x[1][0])
print(2 in x)
```

13 **1x5=5**

```
mydict={'a':27,'b':43,'c':25,'d':30}
vala= ''
valb=' '
for i in mydict :
        if i <vala:
            vala=i
            valb=mydict[i]
print(vala)                    #Line 1
print(valb)                    #Line 2
print(20 in mydict)            #Line 3
mylst=list(mydict.items())
mylst.sort()                   #Line 4
print(mylst[-1])               #Line 5
```

a. What output does line 1 produce ?
b. What output does line 2 produce ?
c. What output does line 3 produce ?
d. What output does line 5 produce ?
e. What is the return value from the list sort() function ?

Q2 Answer the following :

1 State minimum four merits of Python language . **2**

2 Define a Python object quoting an example . State properties of a python object **3**

3 **3**

Give purpose , syntax of the functions given below :
1. sorted () 2.popitem() 3. fromkey()

4 Convert 100 in decimal to Hexadecimal . Convert it back to decimal . Show detailed steps in each conversion process . **4**

5 **4**

a. Give purpose , syntax of the functions given below :

1. partition() 2. split()

b. Give the outputs for :

1. sub= "ringa"

   string.find(sub,15,22)

2. ‘A-2345’.isalnum( )

6 . Give purpose , syntax of the functions given below : **4**

1. extend() 2. pop()

b. Give the outputs for :

1. t1=[1,2]
   t2=[3,4]
   t2=t1.extend(t2)
   print(t2)
2. t1=[‘a’,’b’,’c’,’d’]
   t1.sort(reverse=True)
   print(t1)

Q3 LONG ANSWER TYPE

1 Write a program that rotates the elements of a tuple,containing alphabets ,so that the element at the first index moves to the second index, the element in the second index moves to the third index, etc., and the element in the last index moves to the first index. : **5**

2 Write a program that takes positive integers from user and constitutes a list . Display the largest and secondlargest element from this list . **5**

3 Write a program to convert a decimal number to binary. **5**

4 Write a program to take the name of students as input , then ask marks of five subjects as ‘English’ ,’Physics’, ‘Chemistry’, ‘Maths’,and ‘Computer’. Use dictionary to store the student ‘s name as key and total marks as values . If the total marks for any student is less than 200 print **“FAILED”** along with the name of the student else print **“PASSED” .** The number of students is user defined . **5**

5 Write a program to input employee number and name for ‘N’ employees in a dictionary . ame should be used as key . Display all employees ‘ information in ascending alphabetical der of their names. **5**