KOTHARI INTERNATIONAL SCHOOL, NOIDA
ANNUAL EXAMINATION, SESSION: 2024-25
GRADE: 11 SUBJECT: COMPUTER SCIENCE (083)
SET A

DAY & DATE: MONDAY- FEBRUARY 10, 2025
MAXIMUM MARKS: 70 **TIME ALLOTTED: 3 HOURS**
NAME: _____ **ROLL NO:_____**

GENERAL INSTRUCTIONS:

i. This question paper consists of 4 printed pages and 3 questions. It is compulsory to attempt all questions.
ii. All the answers must be correctly numbered as in the question paper and written in answer sheet .

SECTION A(25 MARKS)

Q1 Answer the following

1 What will be the output of the following piece of code . **1**

```
str="It is not a good idea.Lets change it .It is better to change"
newstr=str.replace("It","That",2)
print(newstr)
```

2 Evaluate the following python expression if a=5, b=2, c=-2 **1**

```
C*2**a
```

3 Evaluate the following Boolean expressions **1+1**
a.1 or None and a or 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

4 What will the following statement yield and why ? **1**

```
>>>2 + '3'
```

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

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

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

```
str= "global warming"
for i in range(-1,-len(str),-1):
```

```
    print(str[i],end=”$”)
```

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

```
print("P#Y#T#H#ON".split("#",2))
```

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

```
print('#'.join("12345"))
```

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

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

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

```
str="Be positive"
print(str[1::2])
```

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

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

12 Which of the following statements is not true about list. **1**

a. A list may comprise a string as one of its elements.
b. A list is always defined by enclosing its elements within square brackets
c. The method del works on list .
d. None of the above

13 The function count() counts the number of elements in a list (T/F). **1**

14 Consider the following code : What will be the output produced if the input is aabbc **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)
```

15 Suppose that L=[“these”,[“are”,”a”],[“few”,”words”],”that”,”we”, “will”,”use”] What do the following expressions evaluate to : **1x3=3**

a. print(“few” in L[2:3][0])
b. print(L[3:4]+L[1:2])
c. print(L[1]+L[2])

16 Read the following code fragments and give outputs . Figure out the errors , if any . **1x3=3**

a. t=['a','b','c','d'.'e']
t[0]='A'
print(t) b.
t1=[3]
t2=[4,5,6]
t3=t1+t2
print(t3)
c. t2=[4,5,6]
t3=[6,7]
print(t3-t2**)**

17 Give the outputs of the codes given below : **1x3=3**

mystr= 'God helps those who helps themselves'
print(mystr.split('my'))
print(mystr.split())
print(mystr.partition('my'))

SECTION B (20 MARKS)

Q2

1 State minimum four points of difference between primary and secondary memory . **2**
Difference could be in terms of : volatility , cost , speed , size

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

3 How can elements of list be sorted in ascending/descending order using a library function . **3**
Elaborate with example

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

5 **4**

a. Elaborate functions given below with syntax and example

1. partition() 2. split()

b. Give the outputs for :

1. 'i love my india'.capitalize() 2. '12345'.isalnum( )

6. **4**

a. Elaborate functions given below with syntax and example

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)
```

SECTION C (25 MARKS)

Q3

1 Write a program that rotates the elements of a list ,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 to find whether the entered number is Armstrong or not . **5**

Armstrong number is a number whose each digit is multipled as many times as the number of digits of that number and then added to get the number.

For example :-

The number is n = 153

Number of digits is d = 3

So each digit will be multiplied as the number of digits...

Like, 153 = (1*1*1) + (5*5*5) + (3*3*3)

where, (1*1*1) = 1

(5*5*5) = 125

(3*3*3) = 27

So, 125 + 27 + 1 = 153

3 Write a program to convert a decimal number to binary . The number is entered by the user. **5**

4 Write a program that capitalizes the first letter of each word in an entered line of text entered by the user . **5**

5 Write a program to generate Fibonacci series upto n . The first two digits are 1,1 **5**