

**KOTHARI INTERNATIONAL SCHOOL, NOIDA**  
**ANNUAL EXAMINATION 2023-2024**  
**GRADE: XI SUBJECT: COMPUTER SCIENCE(083)**

**DAY & DATE: FRIDAY, FEBRUARY 9, 2024**

**TIME ALLOWED: 3 HOURS**

**NAME: \_\_\_\_\_**

**MAXIMUM MARKS: 70**

**General instructions:**

1. This question paper consists of 4 printed 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** What will be the output of the following code . You are expected to write accurate answer . **1**

```
val=2.0
val1=6
print(val1//val)
```

- 2** What will be the output of the following Code? **1**

```
a=3
b=3.0
print(a==b)
print(a is b)
```

- 3** 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

- 4** Predict the output: **1+1**

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

- 5** 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()

- 6** What will be the output of the following code : **1**  
str= "Positive"  
for i in range(-1,-len(str),-1):  
    print(str[i],end="\$")
- 7** Write the output of the following: **1**  
print("1234534".split("3",2))
- 8** Write the output of the following: **1**  
print('@'.join("HELLO WORLD "))
- 9** Write the output of the following code : **1**  
L=["Amit","Sumit","Naina"]; print(L\*3);print(L+2)
- 10** Write the output of the following : **1**  
L=["Amit","Sumit","Naina"];L1=["Sumit"];print(L + L1)
- 11** 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)
- 12** 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])
- 13** Predict the output : **1x3=3**  
x=(1,(2,(3,(4,))))  
print(len(x))  
print(x[1][0])  
print(2 in x)

**14**    mydict={'a':27,'b':43,'c':25,'d':30} **1x5=5**  
       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 two points of difference between primary memory and secondary memory **2**
- 2**    Define with an example the functions given below : **2**  
       (i) popitem()  
       (ii) fromkey()
- 3**    Convert 100 in decimal to Hexadecimal . Convert it back to decimal . Show detailed steps in each conversion process . **2**
- 4**    Give Truth Tables and symbol for following gates **2+2+2**  
       (i)OR (for 3 inputs) (ii) NOT (iii)AND(for three inputs)
- 5**    a. Quote two varied examples on function partition( ) **2+2**  
       b. Give the outputs for :  
           1. sub= "ringa"  
               string.find(sub,15,22)  
           2. 'A-2345'.isalnum( )
- 6**    Quote two varied examples on function pop() **2+2**  
       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 Write Programs :**

- 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. Take user defined inputs . 5
- 2 Write a program that takes positive integers from user and constitutes a list . Display the largest and second largest element from this list . Take user defined inputs . 5
- 3 Write a program to convert a decimal number to binary. 5
  - (i) Library functions for direct conversion
  - (ii) Using loops and an appropriate supportive data type
- 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 . Name should be used as key . Display all employees ' information in ascending alphabetical order of their names. Take user defined inputs . 5