



TIME : 1.5HRS

SUBJECT:COMPUTER SCIENCE

MAX.MARKS: 30

GENERAL INSTRUCTIONS

- 1.The paper is divided into 4 sections A, B and C,D.
2. All questions are compulsory. All programming questions are to be answered using Python Language only.
3. Section A, consists of 6 questions(1-5). Each question carries 1 mark.
4. Section B, consists of 4 questions(6-9). Each question carries 2 marks.
5. Section C, consists of 3 questions(10-12). Each question carries 3 marks.
6. Section D, consists of 3 questions(13-14). Each question carries 4 marks.
7. Write down the correct option completely for MCQs.

Q.no	SECTION-A	Marks
1.	Which among the following is not true? a)The sort() function doesn't make changes in the original sequence b)The sorted() method doesn't affect the original sequence c)The sort() function returns nothing d)The sorted() function always returns a sorted list	1
2.	Given the following list MyList=[[12,14,16],[18,20,11],[22,24,15,19],[31,42,35,52]].Which among the following slicing will produce the output [24,15,19]? a)MyList[1:] b)MyList[1:3] c)MyList[2][1:] d)MyList[2][:1]	1
3.	What will be the output of the following code: T1=tuple({1:"A",2:"B"}) print(T1) a)(1,"A",2,"B") b)(1,2) c)("A","B") d)((1,"A"),(2,"B"))	1
4.	What will the following expression evaluate to: c=43+13-9//3**2*7 print(c) a)56 b)49 c)-7 d>Error	1
5.	Choose the most appropriate option for the Assertion(A) and Reasoning (R): Assertion(A): Python does not allow the use of multiple return statements for returning multiple values to the caller. Reason(R): No statement in the function will be executed after the return statement.The return statement in python is the last statement of the function body which can be referred	1

to as the Function Terminator.

a)Both A and R are true and R is the correct explanation of A.

b)Both A and R are true but R is NOT the correct explanation of A.

c)A is true but R is false.

d)A is false but R is true.

e)Both A and R are false

SECTION-B

6. **Find the output for the following code:** 2

```
st="CBSE-Sample-paper-2023"
lis=st.split("-",maxsplit=2)
lis.insert(2,"CS")
print(*lis)
```

7. a)Predict the output of: 2

```
T=(1,2,'A','B')
w,x,y,z=T
print(w,"-",x,"-",y,"-",z)
b)What is the datatype of T?Is it mutable or immutable?
```

8. Consider the following function: 2

```
invaders="Big Names"
pos=200
level=1
def play():
    max_level=level+18
    print(len(invaders))
    return max_level
res=play()
print(res)
```

Determine the Global name,Local names and builtin names from the above code.

9. Define namespace,scope and lifetime in python context.Explain LEGB rule. 2

SECTION-C

10. Write short notes on the Structural components of a Python Function. 3

11. **Nandan has created the following dictionary.Find the output for statement 1,2 and 3:** 3

```
D={"011":"Delhi","022":"mumbai","033":"Kolkata","044":"kochi","055":"Chennai"}
D1={}
print(D.keys()) #Statement1
for i in D.items():
    if(i[1].istitle()==False):
        D1[i[0]]=i[1].upper()
    print(D1) #Statement2
D.update(D1)
print(D) #Statement3
```

12. **Convert the for loop into while loop:** 3
- ```
print("Convert loop:")
for i in range(9,-2,-2):
 c=0
 print("c=",c+i)
```

SECTION-D

13. **Predict output of Statement 1 and 2 for the following program:** 4
- ```
list1=[]
list2=[2,4,6,8,10,12]
print(len(list2))
for i in range(len(list2)):
    a=list2.pop()
    list1.append(a)
print(list1) #Statement1
for j in range(len(list1)):
    if(j%2!=0):
        b=list1.pop(j)+1
        list1.insert(j,b)
print(list1) #Statement2
```
14. **Predict the output for the following code:** 4
- ```
nm="Computer*123*456*Science"
s=nm.split("*")
print(sorted(s)) #Statement1
c=0
for j in s:
 if j.isdigit():
 c=c+int(j)
print(c) #Statement2
t=nm.partition("*")
fin=t[2]
ch=1
lens=0
while(ch==1):
 for x in fin:
 if x.isdigit() or x=="*":
 lens+=1
 else:
 ch=0
 break;
s1=t[0]+fin[lens:] #Statement3
print("#".join(s1)) #Statement4
```

-----END OF PAPER-----