CBSE Paper 2023

5. Select the correct output of the code : **1**

```
S= "Amrit Mahotsav @ 75"
A=S.partition (" ")
print (a)
```

(a) `( 'Amrit Mahotsav','@','75')`
(b) `['Amrit','Mahotsav','@','75']`
(c) `('Amrit', 'Mahotsav @ 75')`
(d) `('Amrit', '', 'Mahotsav @ 75')`

21. (a) Given is a Python list declaration : **1**

```
Listofnames=["Aman","Ankit","Ashish","Rajan","Rajat"]
```

Write the output of :

```
print (Listofnames [-1:-4:-1])
```

(b) Consider the following tuple declaration : **1**

```
tup1=(10,20,30,(10,20,30),40)
```

Write the output of :

```
print(tupl.index(20))
```

24. (a) Write the output of the code given below : **2**

```
def short_sub (lst,n) :
    for i in range (0,n) :
        if len (lst)>4:
            lst [i]=lst [i]+lst[i]
        else:
            lst[i]=lst[i]
subject=['CS','HINDI','PHYSICS','CHEMISTRY','MATHS']
short_sub(subject,5)
print(subject)
```

OR

(b) Write the output of the code given below : **2**

```
a =30
def call (x) :
      global a
      if a%2==0:
           x+=a
      else:
           x-=a
      return x
x=20
print(call(35),end="#")
print(call(40),end= "@")
```

32. (a) What possible output(s) are expected to be displayed on screen at the time of execution of the following program :

```
import random
M=[5,10,15,20,25,30]
for i in range(1,3):
    first=random.randint(2,5)- 1
    sec=random.randint(3,6)- 2
    third=random.randint(1,4)
    print(M[first],M[sec],M[third],sep="#")
```

(i)
```
10#25#15
20#25#25
```

(ii)
```
5#25#20
25#20#15
```

(iii)
```
30#20#20
20#25#25
```

(iv)
```
10#15#25#
15#20#10#
```

2

CBSE Paper 2021

24. Evaluate the following Python expressions : *2*

(a) `2 * 3 + 4 ** 2 – 5 // 2`

(b) `6 < 12 and not (20 > 15) or (10 > 5)`

29. What possible output(s) is/are expected to be displayed on the screen at the time of execution of the program from the following code ? Also specify the maximum and minimum value that can be assigned to the variable R when K is assigned value as 2. *2*

```
import random
Signal = [ 'Stop', 'Wait', 'Go' ]
for K in range(2, 0, -1):
    R = randrange(K)
    print (Signal[R], end = ' # ')
```

(a) `Stop # Wait # Go #`

(b) `Wait # Stop #`

(c) `Go # Wait #`

(d) `Go # Stop #`

33. Write the output for the execution of the following Python code : *2*

```
def change(A):
  S=0
  for i in range(len(A)//2):
      S+=(A[i]*2)
  return S
B = [10,11,12,30,32,34,35,38,40,2]
C = Change(B)
Print('Output is',C)
```

CBSE Paper 2020

(e) Find and write the output of the following Python code : 2

```
def ChangeVal(M,N):
    for i in range(N):
        if M[i]%5 == 0:
            M[i] //= 5
        if M[i]%3 == 0:
            M[i] //= 3
L=[25,8,75,12]
ChangeVal(L,4)
for i in L :
    print(i, end='#')
```

(f) Find and write the output of the following Python code : 3

```
def Call(P=40,Q=20):
    P=P+Q
    Q=P-Q
    print(P,'@',Q)
    return P
R=200
S=100
R=Call(R,S)
print (R,'@',S)
S=Call(S)
print(R,'@',S)
```

(g) What possible output(s) are expected to be displayed on screen at the time of execution of the program from the following code ? Also specify the minimum and maximum values that can be assigned to the variable End. *2*

```
import random

Colours = ["VIOLET","INDIGO","BLUE","GREEN",
           "YELLOW","ORANGE","RED"]

End = randrange(2)+3
Begin = randrange(End)+1
for i in range(Begin,End):
    print(Colours[i],end="&")
```

(i) `INDIGO&BLUE&GREEN&`	(ii) `VIOLET&INDIGO&BLUE&`
(iii) `BLUE&GREEN&YELLOW&`	(iv) `GREEN&YELLOW&ORANGE&`

(d) Write the output of the following Python code : *1*

```
for i in range(2,7,2):
   print(i * '$')
```

(e) Write the output of the following Python code : *1*

```
def Update(X=10):
   X += 15
   print('X = ', X)

X=20
Update()
print('X = ', X)
```

(d) Find and write the output of the following python code : 2

```
Msg1="WeLcOME"
Msg2="GUeSTs"
Msg3=""
for I in range(0,len(Msg2)+1):
    if Msg1[I]>="A" and Msg1[I]<="M":
        Msg3=Msg3+Msg1[I]
    elif Msg1[I]>="N" and Msg1[I]<="Z":
        Msg3=Msg3+Msg2[I]
    else:
        Msg3=Msg3+"*"
print Msg3
```

14

(e) Find and write the output of the following python code : 3

```
def Changer(P,Q=10):
    P=P/Q
    Q=P%Q
    print P,"#",Q
    return P
A=200
B=20
A=Changer(A,B)
print A,"$",B
B=Changer(B)
print A,"$",B
A=Changer(A)
print A,"$",B
```

Python Output

(f) What possible output(s) are expected to be displayed on screen at the time of execution of the program from the following code ? Also specify the minimum values that can be assigned to each of the variables BEGIN and LAST. *2*

```
import random

VALUES=[10,20,30,40,50,60,70,80]
BEGIN=random.randint(1,3)
LAST=random.randint(BEGIN,4)

for I in range(BEGIN,LAST+1):
  print VALUES[I],"-",
```

(i) 30 - 40 - 50 -	(ii) 10 - 20 - 30 - 40 -
(iii) 30 - 40 - 50 - 60 -	(iv) 30 - 40 - 50 - 60 - 70 -

CBSE Paper 2018

(d) Find and write the output of the following Python code : *2*

```
Data  = ["P",20,"R",10,"S",30]
Times = 0
Alpha = ""
Add   = 0
for C in range(1,6,2):
   Times = Times + C
   Alpha = Alpha + Data[C-1]+"$"
   Add   = Add + Data[C]
   print Times,Add,Alpha
```

(e) Find and write the output of the following Python code : 3

```
class GRAPH:
    def __init__(self,A=50,B=100):
        self.P1=A
        self.P2=B
    def Up(self,B):
        self.P2 = self.P2 - B
    def Down(self,B):
        self.P2 = self.P2 + 2*B
    def Left(self,A):
        self.P1 = self.P1 - A
    def Right(self,A):
        self.P1 = self.P1 + 2*A
    def Target(self):
        print "(",self.P1.":",self.P2,")"
G1=GRAPH(200,150)
G2=GRAPH()
G3=GRAPH(100)
G1.Left(10)
G2.Up(25)
G3.Down(75)
G1.Up(30)
G3.Right(15)
G1.Target()
G2.Target()
G3.Target()
```

(f) What possible output(s) are expected to be displayed on screen at the time of execution of the program from the following code ? Also specify the maximum values that can be assigned to each of the variables BEGIN and LAST. *2*

```
import random
POINTS=[20,40,10,30,15];
POINTS=[30,50,20,40,45];

BEGIN=random.randint(1,3)
LAST=random.randint(2,4)
for C in range(BEGIN,LAST+1):
  print POINTS[C],"#",
```

(i) 20#50#30#	(ii) 20#40#45#
(iii) 50#20#40#	(iv) 30#50#20#

CBSE Paper 2017

(d) Find and write the output of the following Python code : **2**

```
STR = ["90","10","30","40"]
COUNT = 3
SUM = 0
for I in [1,2,5,4]:
    S = STR[COUNT]
    SUM = float (S)+I
    print SUM
    COUNT-=1
```

(e) Find and write the output of the following Python code : **3**

```
class ITEM:
    def_init_(self,I=101,N="Pen",Q=10): #constructor
        self.Ino=I
        self.IName=N
        self.Qty=int(Q);
    def Buy(self,Q):
        self.Qty = self.Qty + Q
    def Sell(self,Q):
        self.Qty -= Q
    def ShowStock(self):
        print self.Ino,":",self.IName,"#",self.Qty

I1=ITEM()
I2=ITEM(100,"Eraser",100)
I3=ITEM(102,"Sharpener")
I1.Buy(10)
I2.Sell(25)
I3.Buy(75)
I3.ShowStock()
I1.ShowStock()
I2.ShowStock()
```

(f) What are the possible outcome(s) executed from the following code ? Also specify the maximum and minimum values that can be assigned to variable N. **2**

```
import random
SIDES=["EAST","WEST","NORTH","SOUTH"];
N=random.randint(1,3)
OUT=""
for I in range(N,1,-1):
    OUT=OUT+SIDES[I]
print OUT
```

(i) **SOUTHNORTH**	(ii) **SOUTHNORTHWEST**
(iii) **SOUTH**	(iv) **EASTWESTNORTH**

CBSE Paper 2016

(d) Find and write the output of the following python code : **2**

```
Numbers = [9,18,27,36]
for Num in Numbers:
    for N in range(1, Num%8):
        print(N,"#",end="")
    print()
```

(e) Find and write the output of the following python code : **3**

```
class Notes:
    def __init__(self,N=100,Nt="CBSE"): #constructor
        self.Nno=N
        self.NName=Nt
    def Allocate(self,N,Nt):
        self.Nno= self.Nno + N
        self.NName= Nt + self.Nname
    def Show(self):
        print(self.Nno,"#",self.NName)
s=Notes()
t=Notes(200)
u=Notes(300,"Made Easy")
s.Show()
t.Show()
u.Show()
s.Allocate(4,"Made")
t.Allocate(10,"Easy")
u.Allocate(25,"Made Easy")
s.Show()
t.Show()
u.Show()
```

(f) What are the possible outcome(s) executed from the following code ? Also specify the maximum and minimum values that can be assigned to variable PICKER. **2**

```
import random
PICK=random.randint(0,3)
CITY=["DELHI","MUMBAI","CHENNAI","KOLKATA"];
for I in CITY:
    for J in range(1,PICK):
        print(I,end="")
    print()
```

(i)	(ii)
DELHIDELHI MUMBAIMUMBAI CHENNAICHENNAI KOLKATAKOLKATA	DELHI DELHIMUMBAI DELHIMUMBAICHENNAI
(iii)	**(iv)**
DELHI MUMBAI CHENNAI KOLKATA	DELHI MUMBAIMUMBAI KOLKATAKOLKATAKOLKATA

(b) What will be the output of the following python code considering the following set of inputs ? **2**

```
JAYA
My 3 books
PICK2
2120
```

Also, explain the try and except used in the code.

```
Counter=0
while True:
    try :
        Number=int(raw_input("Give a Number"))
        break
    except ValueError:
        Counter=Counter+2
        print("Re-enter Number")
print(Counter)
# For later versions of python, raw_input
# should be considered as input
```

CBSE Paper 2015

(d) Find and write the output of the following python code : **2**

```
for Name in ['Jayes', 'Ramya', 'Taruna', 'Suraj']:
    print Name
    if Name[0]== 'T':
        break
else :
    print 'Finished!'
print 'Got it!'
```

(e) Find and write the output of the following python code : **3**

```
class Worker :
    def_init_(self,id,name) :    #constructor
        self.ID=id
        self.NAME=name
    def Change(self):
        self.ID=self.ID+10
        self.NAME='Harish'
    def Display(self,ROW):
        print self.ID,self.NAME,ROW
w=Worker(55,'Fardeen')
w.Display(1)
w.Change()
w.Display(2)
print w.ID+len(w.NAME)
```

(f) What are the possible outcome(s) executed from the following code ? Also specify the maximum and minimum values that can be assigned to variable NUMBER. **2**

```
STRING="CBSEONLINE"
NUMBER=random.randint(0,3)
N=9
while STRING[N]!='L':
    print STRING[N]+STRING[NUMBER]+'#',
    NUMBER=NUMBER+1
    N=N-1
```

(i) ES#NE#IO# (ii) LE#NO#ON# (iii) NS#IE#LO# (iv) EC#NB#IS#

(b) What will be the output of the following python code ? Explain the try and except used in the code. **2**

```
U=0
V=6
print 'First'
try:
    print 'Second'
    M=V/U
    print 'Third',M
    except ZeroDivisionError :
        print V*3
        print 'Fourth'
    except:
        print V*4
        print 'Fifth'
```