
CBSE 2025 COMPARTMENT

- 22.** What is the difference between = and == in Python ? Give an example of each. 2
- 23.** Give an example of each of the following : 2
- (i) An expression using any one identity operator.
- (ii) An arithmetic expression which uses any one augmented assignment operator.
- 24.** Assuming that **D1** and **D2** are Python dictionaries, write the following statements using built-in functions/methods : 2
- (I) (a) To delete all the elements of **D1**.
- OR**
- (b) To generate a list of values of **D1**.
- (II) (a) To update dictionary **D2** with the elements of **D1**.
- OR**
- (b) To generate a tuple of keys of **D2**.
- 25.** Identify the correct possible output(s) of the following code segment. Also write the minimum and the maximum possible values of the variable **b**. 2
- ```
import random
s="War and Peace"
a=len(s)//2
for i in range(4):
 b=random.randrange(i,a)
 print(s[b],end='+')
```
- (A) **n+P+d+a+** (B) **W+r+n+n+**
- (C) **e+r+W+a+** (D) **a+P+e+r+**
- 26.** The code provided below is intended to input a positive integer from the user and display the total number of its factors. However, there are syntax and logical errors in the code. Rewrite the code after removing all the errors. Underline all the corrections made. 2
- ```
n=int(input("Enter a positive integer:"))
c=0
for i in range(n+1):
    if n%i=0:
        c+=1
print(c)
```

31. (a) Write the output on execution of the following Python code : 3

```
P=[3,5,7,4]
P.insert(2,3)
P.extend([10, 6])
print(P)
print(P.index(7))
print(P[::2])
```

CBSE 2025

23. Write one example of each of the following in Python : 2

- (i) Syntax Error
- (ii) Implicit Type Conversion

24. Consider the following dictionaries, D and D1 : 2

```
D={"Suman": 40, "Raj":55, "Raman":60}
D1={"Aditi":30, "Amit":90,"Raj":20}
```

(Answer using built-in Python functions only)

- (i) (a) Write a statement to display/return the value corresponding to the key "Raj" in the dictionary D.

OR

- (b) Write a statement to display the length of the dictionary D1.
- (ii) (a) Write a statement to append all the key-value pairs of the dictionary D to the dictionary D1.

OR

- (b) Write a statement to delete the item with the given key "Amit" from the dictionary D1.

25. What possible output from the given options is expected to be displayed when the following code is executed ? 2

```
import random
Cards=["Heart","Spade","Club","Diamond"]
for i in range(2):
    print(Cards[random.randint(1,i+2)],end="#")
```

- (A) Spade#Diamond#
- (B) Spade#Heart#
- (C) Diamond#Club#
- (D) Heart#Spade#

22. Predict the output of the following code : 2

```
d={"IND": "DEL", "SRI": "COL", "CHI": "BEI"}
str1=""
for i in d:
    str1=str1+str(d[i])+"@"
    str2=str1[:-1]
print (str2)
```

23. (a) Write the Python statement for **each** of the following tasks using BUILT-IN functions/methods only : 1+1=2

- (i) To delete an element 10 from the list **lst**.
- (ii) To replace the string "**This**" with "**That**" in the string **str1**.

OR

(b) A dictionary **dict2** is copied into the dictionary **dict1** such that the common key's value gets updated. Write the Python commands to do the task and after that empty the dictionary **dict1**. 2

26. Predict the output of the Python code given below : 3

```
s="India Growing"
n = len(s)
m=""
for i in range (0, n) :
    if (s[i] >= 'a' and s[i] <= 'm') :
        m = m + s [i].upper()
    elif (s[i] >= 'O' and s[i] <= 'z') :
        m = m +s [i-1]
    elif (s[i].isupper()):
        m = m + s[i].lower()
    else:
        m = m + '@'
print (m)
```

22. Write the output displayed on execution of the following Python code : 2

```

LS=["HIMALAYA", "NILGIRI", "ALASKA", "ALPS"]
D={}
for S in LS :
    if len(S)%4 == 0:
        D[S] = len(S)
for K in D :
    print(K,D[K], sep = "#")
    
```

23. (A) Write the Python statement for each of the following tasks using built-in functions/methods only : 1 + 1 = 2

(i) To remove the item whose key is "NISHA" from a dictionary named **Students**.
 For example, if the dictionary **Students** contains {"ANITA":90, "NISHA":76, "ASHA":92}, then after removal the dictionary should contain {"ANITA":90, "ASHA":92}

(ii) To display the number of occurrences of the substring "is" in a string named **message**.
 For example if the string **message** contains "This is his book", then the output will be 3.

OR

(B) A tuple named **subject** stores the names of different subjects. Write the Python commands to convert the given tuple to a list and thereafter delete the last element of the list.

26. Write the output on execution of the following Python code : 3

```

S="Racecar Car Radar"
L=S.split()
for W in L :
    x=W.upper()
    if x==x[::-1]:
        for I in x:
            print(I,end="*")
    else:
        for I in W:
            print(I,end="#")
print()
    
```

21. (a) Given is a Python string declaration : 1

```
NAME = "Learning Python is Fun"
```

Write the output of : `print(NAME[-5:-10:-1])`

(b) Write the output of the code given below : 1

```
dict1={1: ["Rohit", 20], 2: ["Siya", 90]}
```

```
dict2={1: ["Rahul", 95], 5: ["Rajan", 80]}
```

```
dict1.update(dict2)
```

```
print(dict1.values())
```

32. (a) (i) What possible output(s) are expected to be displayed on screen at the time of execution of the following code ? 2

```
import random
```

```
S=["Pen", "Pencil", "Eraser", "Bag", "Book"]
```

```
for i in range (1,2):
```

```
    f=random.randint(i,3)
```

```
    s=random.randint(i+1,4)
```

```
    print(S[f],S[s],sep=":")
```

Options :

(I) Pencil:Book

(II) Pencil:Book
Eraser:Bag

(III) Pen:Book
Bag:Book

(IV) Bag:Eraser

OR

- (b) (i) Predict the output of the code given below :

```

text="LearningCS"
L=len(text)
ntext=""
for i in range (0,L):
    if text[i].islower():
        ntext=ntext+text[i].upper()
    elif text [i].isalnum():
        ntext=ntext+text[i-1]
    else:
        ntext=ntext+'&&'
print(ntext)

```

CBSE 2023

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(tup1.index(20))
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 (ii) 5#25#20  
20#25#25 25#20#15
- (iii) 30#20#20 (iv) 10#15#25#  
20#25#25 15#20#10#
- 2**

**OR**

(a) Predict the output of the code given below :

```
def makenew(mystr):
 newstr=""
 count=0
 for i in mystr:
 if count%2!=0:
 newstr=newstr+str(count)
 else :
 if i.lower():
 newstr=newstr+i.upper()
 else:
 newstr=newstr+i
 count+=1
 print(newstr)
makenew("No@1")
```

**2**