

I Term Examination : 2023-24

Class - XII (CBSE)

Time : 3 hrs.

Subject - Computer Science (083)

M.M. : 70

General Instructions:-

1. This question paper contains five sections, sections A to E.
2. All questions are compulsory.
3. Section A have 18 questions 01 mark each.
4. Section B has 07 very short answer type questions carrying 02 marks each.
5. Section C has 05 short answer type questions carrying 03 marks each.
6. Section D has 05 long answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each.
6. All programming questions are to be answered using Python Language only.

SECTION - A

Attempt any 15 questions from question no. 1 to 21.

- Q.1- State true or false:- [1]
Python is a case-sensitive language.
- Q.2- The numbered position of a letter in a string is called _____. [1]
a. position b. integer position c. index d. none of these
- Q.3- A list is given as Age = [10, 20, 30, 40, 50, 60]. What will be displayed as Age[2:] + Age[1 : 5 : 2] [1]
- Q.4- A tuple is declared as T1 = (5, 15, 20, 35). What will be the output of print(sum(T1) + min(T1)) ? [1]
- Q.5- Identify the invalid identifier from the following : [1]
_1, int, 2ab.python
- Q.6- What will be the output of the following code : [1]
for x in ["Python"]:
 print(x.swapcase(), end='**')
- Q.7- State True or False:- [1]
Python is a compiler based language.
- Q.8- Identify the valid declaration of test : [1]
test = ("Python : fun")
a. tuple b. list c. dictionary d. none of these
- Q.9- Fill in the blank:- [1]
The smallest individual unit of python program is known as _____.
- Q.10- Fill in the blank:- [1]
The _____ statement is an empty statement in python.
- Q.11- State whether the following statement is True or False:- [1]
The keys of a dictionary must be of immutable type.
- Q.12- Fill in the blank:- [1]
A parameter having default value in the function header is known as _____.
- Q.13- State whether the following statement is True or False:- [1]
A void function also returns a value i.e. none to its caller.
- Q.14- Fill in the blank:- [1]
A _____ is a word having special meaning and role as specified by programming language.
- Q.15- Which will be the output of the following python code? [1]
print([20, 60, 80].pop())
a. 20 b. 60 c. 80 d. None of these
- Q.16- Which of the following keywords marks the beginning of the function block? [1]
a. func b. define c. def d. None of these

- Q.17- Name the function/method to :- [1]
 a. To calculate the length of a string.
 b. To calculate the square root of a number.
- Q.18- What is the value of x? [1]
 $x = \text{int}(13.254/2)$
 a. 17 b. 14 c. 6 d. None of these

SECTION - B

- Q.19- Rewrite the following code in Python after removing all syntax error(s). [2]
 Underline each correction done in the code.
- ```
def chksum():
 x = INT(input("Enter a number"))
 if(x%2 = 0)
 for i in Range(2 * x):
 print()
 else:
 print("#")
chksum()
```

- Q.20- Explain any two features of Python. [2]  
 OR

Differentiate between mutable and immutable data types in Python.

- Q.21- Find and write the output of the following Python code:- [2]
- ```
s = "Python Code 123"
print(s)
r = " "
for i in s:
```

```
    if i.isupper( ):
        r += i.lower( )
    elif i.islower( ):
        r += i.upper( )
    elif i.isdigit( ):
        r += str(int(i)+1)
    else :
        r = r + i
print(r)
```

- Q.22- What is python module? What is it's significance? [2]
- Q.23- Write the use of following operators in python:- [2]
 a. //
 b. **

- Q.24- What are the possible output(s) of 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 x in CITY:
```

```
 for y in range(1, PICK):
 print (x, end = " ")
print()
```

- |                                                                                                                                                                                 |                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <p>a. DELHIDELHI<br/>         MUMBAIMUMBAI<br/>         CHENNAICHENNAI<br/>         KOLKATAKOLKATA</p> <p>c. DELHI<br/>         DELHIMUMBAI<br/>         DELHIMUMBAICHENNAI</p> | <p>b. DELHI<br/>         MUMBAI<br/>         CHENNAI<br/>         KOLKATA</p> <p>d. None of these</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|

Q.25- Define the following terms:-

- a. Literals
- b. Comments

[2]

OR

Convert the following for loop into while loop  
for k in range(10, 20, 5):  
print(k)

### SECTION - C

Q.26- Write a program to input a number and check whether given number is Armstrong or not.

[3]

Q.27- Write a python function Largest(lst1) : which receives a list lst1 consist of numbers and print the largest number of the list.

[3]

OR

Write a function in Python to receive a string and print frequency of every alphabet.

Q.28- What will be the output of the following python code?

[3]

```
L1, L2 =[10, 15, 20, 25], []
for i in range(len(L1)):
 L2.insert(i, L1.pop())
print(L1, L2, sep="&")
```

Q.29- Write a function word4() in Python that displays 4 letter words of inputted string. If the 'string is  
"We are here to learn python. Python has so many features which make it more comfortable interface."

[3]

Output :

here  
many  
make  
more.

Q.30- What is the utility of the built-in function help()? Explain with example.

[3]

OR

What is the difference between a local variable and a global variable?

### SECTION - D

Q.31- Write a program to create a dictionary whose keys are month names and whose values are number of days in corresponding month. Then perform following operations :

[5]

- a. Ask the user to enter a month name and use the dictionary to tell how many days are there in that month.
- b. Print out all the months with 31 days.

Q.32- a. Write python code to accept string st from the user. Pass the string to a function Display(st) which displays the consonants present in the string st.

[3]

Sample Input : Enter a string : Computer

Sample Output : C  
m  
p  
t  
r



b. What will be the output of following code fragment? [2]

```
def increment(n):
 n.append([4])
 return n
```

```
L = [1, 2, 3]
```

```
M = increment(L)
```

```
print(L, M)
```

Q.33- a. Evaluate the following expressions:- [3]

i.  $16 - 8^{**}2 // 6 + 8$

ii.  $\text{not } 20 > 21 \text{ and } 6 > 5 \text{ or } 7 > 9$

iii.  $\text{not False and True or False and True}$

b. Write a function `remove_char(str1, n)`: which receives a string `str1` and an integer `n` and removes character at  $n^{\text{th}}$  index. [2]

### SECTION - E

Q.34- a. What is function in Python? Write any two advantages of functions in Python. [2]

b. Find and write the output of the following python code : [2]

```
def Change(P, Q = 30):
```

```
 P = P + Q
```

```
 Q = P - Q
```

```
 print(P, "#", Q)
```

```
 return (P)
```

```
R = 150
```

```
S = 100
```

```
R = Change(R, S)
```

```
print(R, "#", S)
```

```
S = Change(S)
```

Q.35- Write short notes on following:- [4]

a. Keywords

b. Block

c. Tuple

d. Built-in function

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