

Q1. Print the following statement using print function

"This is my first Python Test"

```
In [ ]: print("This is my first Python Test")
```

Q2. What is 7 to the power of 4?

```
In [ ]: print(7**4)
```

Q3. Split this string:

s = "Hi there Sam!"

into a list.

```
In [ ]: s="Hi there Sam"
l=[]
for letter in s:
    l.append(letter)
print(l)
```

```
['H', 'i', ' ', 't', 'h', 'e', 'r', 'e', ' ', 'S', 'a', 'm']
```

Q4. Given the variables:

Name = "Jeevan"

age = 40

Use .format() method to print the following statement:

The age of Jeevan is 40.

```
In [ ]: Name="Jeevan"
age=40
print('The age of {} is {}'.format(Name,age))
```

Q5. The nested list is given, use the indexing method to find the word "Am here".

lst = [1,5,[3,9],[5,[100,200,['Am here']],29,11],[1,7]]

```
In [ ]: lst = [1,5,[3,9],[5,[100,200,['Am here']],29,11],[1,7]]
lst[3][1][2]
```

Q6. From nested dictionary find the word "hi".

```
d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hi']}]}]}
```

```
In [30]: d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hi']}]}]}
```

```
d['k1'][3]['tricky'][3]['target'][3]
```

```
Out[30]: 'hi'
```

Q7. What is the main difference between a tuple and a list? Write down in points

```
In [ ]: ''' the main difference b/w tuple and list
1 . The list can be changed
tuple is immutable or can not be changed
2. The list can be updated , new elements can be added after formation
once tuple is formed, it can neither be updated or added with new data
```

Q8. Create a function GetDomain that finds the email website domain from a string in the form:

```
python@cdac.in
```

**So for example, passing "[python@cdac.in \(mailto:python@cdac.in\)](mailto:python@cdac.in)" would return:**  
**cdac.in**

```
In [ ]: def GetDomain(string):

    string.index('@')
    print(string[6:])
GetDomain("Python@cdac.in")
```

Q9. Write function that returns True if the word 'python' is contained in the input string by user

```
In [ ]: string=str(input("enter user"))
p="python"

def user(string):
    if "python" in string:
        print("True")
    else:
        print("boke")

user(string)
```

Q10. Use lambda expressions and the filter() function to filter out words from a list that start with the letter 'p'.

For example:

```
seq = ['paras','dog','pen','cat','great','pizza']
```

Output:

```
['paras','pen','pizza']
```

In [ ]:

Q11. You are driving a little too fast, and a police officer stops you.

Write a function name CheckSpeed to return one of 3 possible results: "No challan", "Small challan", or "Big challan".

- Check the speed of the car, if your speed is 60 or less, the result is "No challan".
- If speed is between 61 and 80 inclusive, the result is "Small challan".
- If speed is 81 or more, the result is "Big challan".

Note:- Unless it is your birthday (take it as a boolean value in the parameters of the function) -- on your birthday, your speed can be 5 higher in all cases.

```
In [ ]: def CheckSpeed(speed, is_birthday):  
        pass
```

Q12. Reverse the string 'Python' using slicing

```
In [22]: str='Python'
```

```
Out[22]: 'Pytho'
```

Q13. Write a function to give the following output from input.

**Input:** aabbbcccddeeff

**Output:** a2b3c3d1e2f2

In [ ]:

Q 14. What is unique about a set?

```
In [ ]: set can not store same values
```

Q 15. What is the correct syntax for defining a class called Enjoy, if it inherits from a parent class called Test?

- a) class Enjoy(Test): pass
- b) def Enjoy(Test): pass
- c) def Enjoy.Test(): pass
- d) class Enjoy.Test(): pass

In [ ]: a

Q 16. Which statement does NOT describe the object-oriented programming concept of encapsulation?

- a) It protects the data from outside interference.
- b) A parent class is encapsulated and no data from the parent class passes on to the child class.
- c) It keeps data and the methods that can manipulate that data in one place.
- d) It only allows the data to be changed by methods.

In [ ]: d

Q17. What is the correct way to call a function?

- a) get\_max\_num([57, 99, 31, 18])
- b) call.(get\_max\_num)
- c) def get\_max\_num([57, 99, 31, 18])
- d) call.get\_max\_num([57, 99, 31, 18])

In [ ]: c

Q18. Write a program using list comprehension to print a set of all the multiples of 3 less than 100

In [ ]:

Q19. What Python mechanism is best suited for telling a user they are using a deprecated function

- a) sys.stdout
- b) traceback
- c) warnings
- d) exceptions

In [ ]: c

Q20. Create a list of tuples matching these lists of name and age?

Name = ["Priya", "Maddy", "David"]

```
Age = [19, 25 , 22]
```

```
Output : [{"Priva" : 19}, {"Maddy" : 25}, {"David" : 22}]
```

In [ ]: