## **FUNCTIONS**

## **ASSIGNMENTS**

- Q.1 If return statement is not used inside the function, then what value will be returned by a function.
- Q.2 What is the output of the following code?

```
def myfun(*name):
```

```
print('Hello', name)
```

myfun('my', 'school')

Q.3 What is the output of the following code?

```
numbers = [4, 5, 6]
```

newNumbers = tuple(map(lambda x: x , numbers))

print(newNumbers)

- Q.4 Define a function which will find all such numbers which are divisible by 7 but are not a multiple of 5,between 1000 and 3000 (both included)
- Q.5 Define the same function of question no 4 where starting and ending number is passed as argument
- Q.6 Define a function that accepts a sentence and calculate the number of letters and digits
- Q.7 Define a function that accepts a sentence and calculate the number of upper case letters and lower case letters
- Q.8 Define a function that can accept two strings as input and concatenate them and then print it in console.
- Q.9 Define a function which can generate and print a list where the values are square of numbers between 1 and 20 (both included).
- Q.10 With a given tuple (1,2,3,4,5,6,7,8,9,10), define a function to print the first half values in one line and the last half values in one line.
- Q.11 What is the output of the below program?

```
def myfunc(a, b=5, c=10):
```

```
print('a is', a, 'and b is', b, 'and c is', c)
```

myfunc(3, 7)

myfunc(25, c = 24)

```
myfunc(c = 50, a = 100)
Q.12 What is the output of the below program?
x = 150
def myfunc():
  global x
  print('x is', x)
  x = 2
  print('Changed global x to', x)
myfunc()
print('Value of x is', x)
Q.13 What is the difference between a parameter and an argument?
Q.14 Why is using the global statement a bad practice?
Q.15 How can we make a parameter of a function optional?
Q.16 What is the difference between local and global variables?
Q.17 Write a function called my_buzz that takes a number.
      If the number is divisible by 3, it should return "Fizz".
      If it is divisible by 5, it should return "Buzz".
      If it is divisible by both 3 and 5, it should return "FizzBuzz". Otherwise, same no.
Q.18 Write a function that returns the sum of multiples of 3 and 5 between 0 and limit
(parameter)
Q.19 Write a function that prints all the prime numbers between 0 and limit where limit is a
parameter.
Q.20 What Is The Output Of The Following Code Snippet?
x = 50
def func():
  global x
  print('x is', x)
  x = 2
  print('Changed global x to', x)
```

```
func()
print('Value of x is', x)
Q. 22 What Is The Output Of The Following Code Snippet?
num = 1
def func():
  global num
  num = num + 3
  print(num)
func()
print(num)
Q.23 What Is The Value Of Num After The Function Call?
def myfunc(text, num):
  while num > 0:
     num = num - 1
num=4
myfunc('Hello', num)
Q.24 What Is The Output Of The Following Code Snippet?
def testvarargs(farg, *args):
  print ("formal arg:", farg)
  for arg in args:
     print ("another arg:", arg)
testvarargs(1, "two", 3)
```

Q.25 What Is The Name Given To That Area Of Memory, Where The System Stores The Parameters And Local Variables Of A Function Call?

```
Q.26 What Is The Output Of The Following Code Snippet?

exp = lambda x: x ** 3

print(exp(3))
```

- Q.27 Write a function func1() such that it can accept a variable length of argument and print all arguments value
- Q.28 Create a function that can accept two arguments name and age and print its value
- Q.29 Create a function showEmployee() in such a way that it should accept employee name, and it's salary and display both, and if the salary is missing in function call it should show it as 10000
- Q.30 Write a function calculation() such that it can accept two variables and calculate the addition and subtraction of it. And also it must return both addition and subtraction in a single return call
- Q.31 Predict the output of following python program:

```
r = lambda q: q * 3
s = lambda q: q * 2
x = 2
x = r(x)
x = s(x)
x = r(x)
print x
Q.32 Predict the output of following python program:
count = 1
def doTask():
    global count
    for i in (1, 2, 3):
        count += 1
doTask()
print (count)
```