## 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 $>0$ :

$$
\text { num = num }-1
$$

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))

