1. Why are functions advantageous to have in your programs?

A. Functions are small blocks of code that encapsulate logic and accept parameters, which promotes reusability and modularity in the program.

2. When does the code in a function run: when it's specified or when it's called?

A. When it is called.

3. What statement creates a function?

A. def is used to declare functions. below is the syntax for function.

def <function\_name>:

<logic>

4. What is the difference between a function and a function call?

A. A function is the set of instructions(code) with a user defined name whereas function call is the usage of the function by using name instead of writing the whole code again.

5. How many global scopes are there in a Python program? How many local scopes?

A. One global scope is there in python program that is the outermost level where all the variables, functions and classes are defined. There can be multiple local scopes it depends upon the number of functions or code blocks declared. A Local scope is the variable defined inside the function or class and only accessible inside the function.

6. What happens to variables in a local scope when the function call returns?

A. When a function call returns, the local variables within that function's scope are destroyed and their memory is released.

7. What is the concept of a return value? Is it possible to have a return value in an expression?

A. In a function when executed it runs the block of code that is inside it. But when we want to use the result of the whole logic of the code block by calling function name, we have to assign the result to return keyword. Yes, we can have a return value in an expression.

eg:

def sum(a,b):

return a + b #usage of return value.

c = sum(1,2) + 3 # return value in an expression

8. If a function does not have a return statement, what is the return value of a call to that function?

A. None. A function by default returns None

9. How do you make a function variable refer to the global variable?

A. We must use keyword called "global". when we declare a variable using global keyword it is accessible outside the scope.

def my\_function():

global global\_var # make global\_var global using global keyword

global\_var = 5 # assing the value to global variable.

my\_function()

print(global\_var) # o/p: 5

10. What is the data type of None?

A. NoneType

11. What does the sentence import areallyourpetsnamederic do?

A. if the module areallyourpetsnamederic exist then it imports module areallyourpetsnamederic to the current scope for using the module. A module is nothing but a code block. it can be function or class.

12. If you had a bacon() feature in a spam module, what would you call it after importing spam?

A. I can import the spam module and call the bacon() method.

eg:

from spam import bacon

bacon()

13. What can you do to save a programme from crashing if it encounters an error?

A. I can use try..except block around the logic to save it from crash.

14. What is the purpose of the try clause? What is the purpose of the except clause?

A. try block safely allow the code to run the logic inside it. if any exception occurs it exits the try block. except is the clause to define the exception type and it allows you to handle the exception.