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

Ans: - Re-useability, Readability, Useful doc string information, consistent code flow, reduces complexity, flexibility for passing arguments/parameters, can be created as easily adaptable or portable modules which can be imported and used wherever needed.

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

Ans: - Only when function is called, it runs the code. During function specification, it validates only syntactical checks.

3. What statement creates a function?

Ans: - def function\_name():

<statements>

return <return\_variable>

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

Ans: - function is standalone specification that defines code flow validating only basic syntax checks whereas function call depends on function specification which will be executed once function call is performed.

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

Ans: - 1 global scope accessing public members and 2 local scopes accessing protected and private members.

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

Ans: - while accessing protected members in local scopes, it is accessible but while accessing private members in local scopes, it throws error as private members are not accessible to any instance.

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

Ans: - if any function or any element is passed as input and expecting some output in return stands for concept of a return value. Yes, return value can be captured in expression assigning to a variable such as a=len(“valli”).

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

Ans: - Logic inside the function will get executed and returns nothing (not even a blank or null or None).

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

Ans: - function variable to be initialized outside the function to make it as global variable.

10. What is the data type of None? Ans: - NoneType

11. What does the sentence import areallyourpetsnamederic do?

Ans: - Tries to check whether any python script file in the name as ‘areallyourpetsnamederic’ available in the current directory. If it exists, tries to import it as a module otherwise throws error as module name ‘areallyourpetsnamederic’ does not exists.

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

Ans: - spam.bacon()

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

Ans: - If programme is able to encounter error, then it throws error immediately which will not lead to any crashing. Crashing will happen only when the programme is getting executed as infinite loop without any errors that leads to very high memory consumption. In that case of crashing only, we need to interrupt keyboards keys – cntrl + c or restart the kernel. Still if we need to handle infinite loop logically from crashing, then we can define exceptions.

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

Ans: - Purpose of try clause is to raise both system and user defined exceptions. Purpose of except clause is to capture and handle the exception raised in try clause.