1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6

**Ans: Values are: ’hello’ ,-87.8, and 6.**

**Expressions are: -,/ ,+**

2. What is the difference between string and variable?

**Ans: Variable is used to store the information that can be used to process in the program. Where as string is the information ,can be filled in the variable. String is group of character or characters represented in single or double quotes.**

3. Describe three different data types.

**There are 3 different types in Python.**

**Int , float and complex data types.**

**Int: Used to represent only integer numbers.**

**Float: Used to represent decimal values.**

**Complex data types: Used to represent complex numbers.**

4. What is an expression made up of? What do all expressions do?

Ans: An expression is a combination of variables, values , operators, Evaluation of expressions gives the result or output.

Ex:

x=10+15

Print(x)

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

**Ans: An expression is a combination of operators and operands. Evaluation of expressions gives the result or output.**

**Interpreter executes instructions in python are the statements in python. There are two types of statements ,print and assignment**.

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

**Ans: It gives the value 23.**

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

**Ans: spamspamspam ie first one is string concatenation and second one is string multiplication .**

8. Why is eggs a valid variable name while 100 is invalid?

Ans: There are certain set of instructions to be a variable in python.

Variable cannot starts with number. It starts with letter , underscore,alphanumeric and also there are some reserved keywords are available in python ,they cannot be used as variables, so 100 is invalid variable.

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

Ans: int (), float() and str()

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

Ans: 99 is the integer , it should be converted into string first.

'I have eaten ' + str(99) + ' burritos.'