**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: - \* , - , / , + are operators and ‘hello’ , -87 are values

**2. What is the difference between string and variable?**

Variables - it is defined as the location where any values such as integers or strings can be stored

Strings – any values which are stored inside inverted commas are called as strings. They can be integer and alphabets as well.

**3. Describe three different data types.**

Ans: -

Integer – They are zero, positive or negative whole numbers without a fractional part and having unlimited precision.

Complex - Complex numbers are written in the form, x + yj , where x is the real part and y is the imaginary part.

Float -It is used to represent real numbers and is written with a decimal point dividing the integer and fractional parts

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

Ans: - An **expression** is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated. If you ask Python to print an expression, the interpreter **evaluates** the expression and displays the result.

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

**Ans: -** Statements represent an action or command e.g print statements, assignment statements whereas expression is a combination of variables, operations and values that yields a result value.

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

**bacon = 22**

**bacon + 1**

**Ans: -** 22

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

**'spam' + 'spamspam'**

**'spam' \* 3**

**Ans: -** Output will be same for bothy the cases **‘spamspamspam’**

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

**Ans: -** Because variable name cannot start with a number.

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

**Ans**: - int() for integer, float() for floating point number and str() for string

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

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

**Ans: -** Because 99 is integer and other two are string, we need to convert 99 to string datatype, correct expression is

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