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.

\* Multiplication

'hello' STRING

-87.8 INTEGER

- ­­­ Subtraction

/ Division

+ Addition

6 INTEGER

2. What is the difference between string and variable?

ANS - Strings are sequences of characters that are used for conveying textual information and Variable is a symbolic name that is a reference or pointer to an object. Once an object is assigned to a variable, you can refer to the object by that name. But the data itself is still contained within the object

3. Describe three different data types.

ANS -  int, float, string

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

ANS - A combination of operands and operators is called an expression. The expression in Python produces some value or result after being interpreted by the Python interpreter. An expression in Python is a combination of operators and operands. An example of expression can be : x = x + 1 0 x = x + 10 x=x+10.

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

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

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

bacon = 22

bacon + 1

ANS- bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

ANS - ‘spamspamspam’  
 ‘spamspamspam’

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

ANS - 100 is an integer, where eggs can be used as a variable

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

ANS - The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

ANS - “99” is an integer and not a string, so the operations are incompatible until “99” is converted into a string.  
  
Fix: use str() to convert “99” to a string.