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**: 'hello' , -87.8 , 6

**Expressions** : \* , - , / , +

2. What is the difference between string and variable?

Ans: **Variable**- It is an identifier to play around with a value that is created and stored in a memory location. A variable can be of several types like integer, string, float, etc.

**String**: A string is nothing but, anything you assign to a variable using quotes (single or double) will be considered as a string.

Exp: a = "10"

b = "20"

print(a+b) ##prints 1020

3. Describe three different data types.

**Ans**: Python has several datatypes:

1.Numeric: Int.(numbers without decimal).

2. Boolean(True or False).

3. Dict (key value pair).

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

**Ans**: An expression is a combination of operators and operands that is interpreted to produce some other value.

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 that does something ,ex- assignment statements like spam=10.

Expression is a combination of variables, operations and values which yields something.

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

bacon = 22

bacon + 1

**Ans**: If we run the above code, it will give the result as 23. But variable bacon still contain 22, when we run print (bacon )

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

'spam' + 'spamspam'

'spam' \* 3

**Ans :** Result would be same

'spam' + 'spamspam' --> 'spamspamspam'

'spam' \* 3 --> 'spamspamspam'

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

**Ans**: Because variable names cannot begin 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() , float() , and str( ) functions can be used.

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

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

**Ans**: The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator.

The correct way is : 'I have eaten ' + str(99) + ' burritos'