Q1. 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:

1) * - Expression
2) 'hello' – String
3) -87 – Value
4) – Expression
5) / - Expression
6) + - Expression
7) 6 – value

Q2. What is the difference between string and variable?

String	Variable
1 – String is a class.	1 – Variable is place where we store data.
2 – String can't be used for calculations.	2 – Variable's are used for calculation.
3 – String can be used to store any value,expression,char.	3 – In variable we can only store the data which is specified in datatype.
4 – A string is a value representing text.	4 – A variable is a name that can refer to any value.

Q3. Describe three different data types.

Ans 3 – 1) Integer 2) String 3) Float

1) Integer : Integer is a type of datatype which can only store number or digits.we can not insert float or decimal values inside a interger datatype.

2) String : String is datatype which is collection of characters, String is used to hold a sequence of characters. We can use any type of Value,Characters,Bool,Float inside single quotes ('') or double quotes ("").

3) Float : Float datatype can store decimal values inside any variable defined as float, If we enter any digit withour decimal in float variable than it will convert it into an decimal value by adding (.0000) into it.

Q4. What is an expression made up of? What do all expressions do?

Ans 4 - 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.

Q5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

Ans 5 –

Expression	Statement
1 – Expression's are used to express. Like this belongs to this,	1 – Statement's is a whole line of a program.
2 – Expression's has a logical use in a program be it in any language.	3 – Statement's are used to maintain the structure of a program.
4 – Ex :- '=' '+' '-'	3 – Ex :- name = "My name is jay gupta" Print(f"{name}")

6. After running the following code, what does the variable bacon contain?
bacon = 22
bacon + 1

And 6 – bacon will contain 22.

7. What should the values of the following two terms be?
';spam' + 'spamspam';
'spam' * 3

Ans 7 –

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

Ans 8 – In any Compiled or Interpreted language there is a rule that all variable must start with a character, because if we start an variable compiler will get confused that is it variable or identifier.

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

Ans 9 – 1) int() 2) float() 3) str()

10. Why does this expression cause an error? How can you fix it?
'I have eaten ' + 99 + ' burritos';

Ans 10 – Because this expression contains values in between so when interpreter aquaries this line it will treat it as math equation we have to write ('99') then it will work