**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 :-** Mathematical Operators :- \*, - , / , +

String Expressions: - ‘Hello’

Value :- -87.8, 6

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

**Ans** :-

* String :- Sequence of unicode characters consist of letters, numbers or special characters are called string. For Ex :- string (sequence of character i.e ‘s’,’t’,’r’,’i’,’n’,’g’.)
* Variable :- Variables are the container which can store some data with its memory id. For Ex :- X = 10 (X is variable and 10 is the value of that variable.)

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

**Ans :-** Data types are the classes of any object in python.

* X = 5 (Integer datatype which contains an integer value.)
* X = 2.5(Float datatype which contains a decimal value.)
* X = “String” (String datatype which contains any character.)
* X = True or False ( Boolean datatype that represents the truth values.)

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

**Ans :-** An **expression** is a combination of values, variables, operators that is interpreted to produce some other value. Ex :- x = 5, y = 3, z = x + y

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

**Ans :-** Any Instruction that a python interpreter can execute is called a **Statement**. An expression evaluates to a single value. A statement does not.

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

**bacon = 22**

**bacon + 1**

**Ans :-** Variablebacon contains only value 22.

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

**'spam' + 'spamspam'**

**'spam' \* 3**

**Ans :-** Both of them contains same value after execution i.e :- (‘spamspamspam’)

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

**Ans :-** Variable names cannot begin with a number. i.e :- 1eggs is not valid variable name,eggs1 is valid.

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

**Ans :-** We can use int(), float(), and str() functions which will evaluate to get the integer, floating-point number, and string versions of the value.

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

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

**Ans :-** It will throw an error as interpreter cannot concatenate string value to integer value. we can fix it by changing integer value i.e. :- 99 to string value by using double quotes i.e. :- “99”.