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: 6,-87.8,’hello’ expression: + ,- , / , \***

2. What is the difference between string and variable?

**Variable is used to store/assign values. String contains characters which denoted by single quote/double quote.**

3. Describe three different data types.

**Numerical data type: int-80,60,30 ,float-90.25,30.5 ,complex- 10+5j**

**Sequential data type: list-[25,’teju’,256.5] ,tuple-(25.3,562,’Bengaluru’),**

**string-‘karnataka KA14’.**

**Bool- True,False**

**Dict : {‘Name’ :’tejus’ , ‘Address’:’ Bengaluru karntaka’,’Email id’: ‘tejas.sd5@gmail.com’} –stores data as key value pair.**

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

**Ans: Expressions made up of operators and operands which are interpreted to produce desired result.**

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

**Ans: statement used to create variable or display value. Expression produces value/result after being interpreted.**

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-‘spamspamspam’**

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

**Ans-variable should fulfil the following rules-**

**-variable should start with letter or underscore**

**-Reserved keywords not used as variable**

**-Variable allows only alphanumeric value and underscore.**

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

**Ans: int(),float(),str().**

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

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

**It is TypeError ,can only concatenate str (not "int") to str.**

**Solution: 'I have eaten ' + ‘99 ‘+ ' burritos.'**