Class: 11th (CS)	Department of Computer Science	Date of submission:
Worksheet No:03	Topic: Basics of Python	Note: Use Python 3.7.x

1. What is python? Write the features of python programming language

2. What is an IDLE ?

3. What is an interactive mode?

4. Differentiate interactive mode and script mode?

5. What is variable? State the basic rules to declare variables in python.

6. Which type of data is accepted by input ( ) function?

7. What is an expression? Give its types with an example.

8. What is an operator? List its types with an example

9. What is Datatype in python? List all the data types supported by python.
10. What will be the output of the following code?
    ```
    a=3-4+10
    b=5*6
    c=7.0/8.0
    print("These are the values :",a, b, c)
    ```

11. a) Difference between :
    - int ( ) and float( )
    - eval( ) and type( )
    - "hello" and " 'hello' "
    - input( ) and print( )
    - print("2"+"3") and print(2+3)

12. Differentiate between
    / and %
    // and /
    *and **
    Try with an appropriate example

13. Guess the output for following

```
>>>"hello"
>>>print("hello")
>>>print('hello')
>>>print("""hello""")
```

14. Guess the output
    i)   10+20*2+4/2
    ii)   (3+4)*2
    iii)   12+(6-2)**3//6−2*1
    iv)   2+4−6*3//2**3

15. Guess the output
```
print(34+10)
print("34+10")
```

16. What is the expected output? Why?
    i)   A=10
            B=20
            C+=A+B
            print("sum is ",C)
    ii)   a=5
            b=10
            a+=a+b
            b*=a+b
            print(a,b)

17. Give the output (Boolean values True or False)
    x=32, y=7, z=1
    i)   x>y and z<10
    ii)   x<y or y>=6
    iii)   not z
    iv)   z==x
    v)   y!=z

18. a=3, b=4

Write python expressions and then guess the output:

   i) $a+b/ab$

   ii) $(a+b)^2/(a^2+b)$

   iii) a^2+b^2+2ab

   iv) $2a+(4b)^2$