**WORKSHEET 2 PYTHON**

Q1 to Q7 have only one correct answer. Choose the correct option to answer your question.

1. Which of the following is not a core datatype in python?

A) list

B) struct

C) tuple

**D) set**

2. Which of the following is an invalid variable name in python?

A) \_init\_

B) no\_1

C) 1\_no

D) \_1

3. Which one of the following is a keyword in python?

A) in

**B) \_init\_**

C) on

D) foo

4. In which of the following manner are the operators of the same precedence executed in python? A) Left to Right

B) BODMAS

C) Right to Left

D) None of these

5. Arrange the following in decreasing order of the precedence when they appear in an expression in python?

i) Multiplication

ii) Division

iii) Exponential

iv) Parentheses

A) iii – iv – ii – i

B) iii – iv – i – ii

C) iv – iii – ii – i

D) iii – ii – i – iv

6. (28//6)\*\*3/3%3 = ?

A) 7.1111…

B) 0

C) 0.3333…

D) 1

7. a = input(“Enter an integer”). What will be the data type of a?

A) int

B) str

C) float

D) double

Q8 and Q10 have multiple correct answers. Choose all the correct options to answer your question. 8. Which of the following statements are correct?

A) Division and multiplication have same precedence in python

B) Python’s operators’ precedence is based on PEDMAS

C) Python’s operators’ precedence is based on VBODMAS

D) In case of operators’ having the same precedence, the one on the left side is executed first.

9. Which of the following is(are) valid statement(s) in python?

A) abc = 1,000,000

B) a b c = 1000 2000 3000

C) a,b,c = 1000, 2000, 3000

D) a\_b\_c = 1,000,000

Which of the following is not equal to x16 in python?

A) x\*\*4\*\*4

B) x\*\*16

C) x^16

D) (x\*\*4)\*\*4

**Q11 to Q13 are subjective questions, answer them briefly**

**11. Differentiate between a list, tuple, set and dictionary.**

A list is a sequence of elements in a specified order.

A list is represented by [] and are mutable.

• A tuple is basically immutable list, represented by () and Values in the tuple cannot be modified, The comma separated values can be in enclosed in parenthesis but not mandatory

• Set is collection which is ordered and unordered. Sets are basically represented by curly braces {}

• A dictionary is a collection which is un ordered and un indexed, changeable.

In python which can be represented by curly braces and it contains key value pairs.

**12. Are strings mutable in python? Suppose you have a string “I+Love+Python”, write a small code to replace ‘+’ with space in python.**

Python strings is a sequence of characters enclosed in quotes.

• Strings are immutable i.e., the contents of the string cannot be changed after it is created

• Python does not support character data type.

A string of size 1 can be treated as characters Code: - string = "I+Love+Python" String=string.

Replace ("+","")

**13. What does the function ord() do in python? Explain with an example. Also, write down the function for getting the data type of a variable in python.**

The python ord() function returns an integer representing Unicode code point for the given Unicode Character

Example:- # Code point of an integer

print(ord(‘8’))

# Code point of character

print(ord(‘&’))

Output:

56

38

**Function for getting the data type of a variable is type() function, it returns the type of the variable passed**

Example:

a=66

print(type(a))

Output: < type ‘int’>

**Q14 and Q15 are programming questions. Answer them in Jupyter Notebook.**

14. Write a python program to solve a quadratic equation of the form ax^2+bx+c=0. Where a, b and c are to be taken by user input. Handle the erroneous input, such as ‘a’ should not be equal to 0.

15. Write a python program to find the sum of first ‘n’ natural numbers without using any loop. Ask users to input the value of ‘n’