**Assignment -1**

Q1. Why do we call Python as a general purpose and high-level programming language?

Ans : Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

**Python is a very high-level programming language because its syntax so closely resembles the English language. Higher-level means it’s more readable to humans and less readable to computers. Likewise, Lower-level means less readable for humans and more readable for computers.**

**Q2. Why is Python called a dynamically typed language?**

**Ans :** But Python is a **dynamically typed** language. It doesn’t know about the type of the variable until the code is run. So declaration is of no use. What it does is, It stores that value at some memory location and then binds that variable name to that memory container. And makes the contents of the container accessible through that variable name. So the data type does not matter

Q3: List some pros and cons of Python programming language?

Ans : Pros and cron of python :

. Python is easy to read and learn.

. Python is enhances productivity

. Python is open sources**.**

. Python has a vast collection of libraries

. Python has speed limitations

.Consume lots of memory space

Q4. In what all domains can we use Python?

Ans: Machine learning / Artificial intelligence, Data analytics and data visualization, Web development,

Game development, Mobile app development.

Q5. What are variable and how can we declare them?

Ans : A variable declaration always contains two components: the type of the variable and its name. Also, the location of the variable declaration, that is, where the declaration appears in relation to other code elements, determines the scope of the variable.

Example : x=5 ,y=3 and z=’RAM’

Q6.How can we take an input from the user in Python?

Ans: In python for taking input Basically declare a variable and print the variable also use input() statement.

inp = input('STATEMENT')

Q7. What is the default datatype of the value that has been taken as an input using input() function?

Ans : Intiger,float,string,Bolien etc.

Q8. What is type casting?

Ans: Type Casting is the method to convert the variable data type into a certain data type in order to the operation required to be performed by users.

Q9. Can we take more than one input from the user using single input() function? If yes, how? If no, why?

Ans: Yes, using split() function.

input().split(separator, maxsplit)

Q10. What are keywords?

Ans : Value ,Operator ,Control Flow ,Iteration ,Structure ,Import

Q11: Can we use keywords as a variable? Support your answer with reason.

Ans : We cannot use a keyword as a variable name, function name, or any other identifier. They are used to define the syntax and structure of the Python language.

Q12. What is indentation? What's the use of indentaion in Python?

Ans : Indentation refers to the spaces at the beginning of a code line. Where in other programming languages the indentation in code is for readability only, the indentation in Python is very important. Python uses indentation to indicate a block of code.

Q13: How can we throw some output in Python?

Ans : In python Basically use print() statement for throw output.

Q14. What are operators in Python?

Ans : Numerical operators in Python, Comparison Operators, Assignment operators,Logical operator.