**CLASS -XI (IP)**

**Python Fundamentals**

**SOLUTION**

**Q.1 What is None literal in Python?**

Ans: Python has one special literal, which is None. The None literal is used to indicate absence of value. It is also used to indicate the end of lists in Python. It means ―There is nothing here‖.

**Q.2 What is the error in following code: x, y =7 ?**

Ans: The following error comes – ‘int’ object is not iterable. Which means an integer object i.e. cannot be repeated for x and y. one more integer object is required after 7.

**Q.3 what will the following code do: a=b=18 ?**

Ans: This code will assign 18 to a and b both.

**Q.4 What is the difference between a keyword and an identifier?**

Ans: Difference between Keyword and Identifier: Every language has keywords and identifiers, which are only understood by its compiler. Keywords are predefined reserved words, which possess special meaning. An identifier is a unique name given to a particular variable, function or label of class in the program.

**Q.5 What are literals in Python? How many types of Literals allowed in Python?**

Ans: Literals: Python comes with some built-in objects. Some are used so often that Python has a quick way to make these objects, called literals.
The literals include the string, Unicode string, integer, float, long, list, tuple and dictionary types.

**Q.6 How many types of sequences are supported in Python?**

Ans: Three Types of Sequences are supported in python:
(i) String
(ii) List
(iii) Tuple

**Q.7 What factors guide the choice of identifiers in program?**

Ans: (i) An identifier must start with a letter or underscore followed by any number of digits and/or letters.

(ii) No reserved word or standard identifier should be used.

(iii) No special character (Other than underscore) should be included in the identifier.

**Q.8 What is the difference between an expression and a statement in Python?**

Ans: A statement is an instruction that the Python interpreter can execute. We have only seen the assignment statement so far. Some other kinds of statements that we‘ll see shortly are while statements, for statements, if statements, and import statements.

An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated. If you ask Python to print an expression, the interpreter evaluates the expression and displays the result.

**Q.9 What are tokens in Python? How many types of tokens allowed in Python?**

Ans: Tokens are the smallest unit of the program. There are following tokens in Python:

i) Reserved words or Keywords

ii) Identifiers

iii) Literals Definition of all tokens may come. Which is not given

iv) Operators in this question bank.

v) Punctuators

**Q.10 What are operators? What is their function? Give examples of some unary and binary operators.**

Ans: “Operators are those symbols used with operands, which tells compiler which operation is to be done on operands. In other words – ―operators are tokens that trigger some computation/action when applied to variables and other objects in an expression.
Operators are of following types:

i) Unary operators like (+) Unary Plus, (-) Unary Minus, not etc.

ii) Binary Operators like (+) addition, (\*) multiplication, and etc.

**Q.11 What is the role of indentation in Python?**

Ans: Indentation plays a very important role in Python. Python uses indentation to create blocks of code. Statements at same indentation level are part of same block/suit. You cannot unnecessarily indent a statement; python will raise an error for that.

**Q.12 How many types of strings are supported by Python?**

Ans: Python supports two types of strings:

(i) Single-line string That terminates in single line.

(ii) Multi-line String That stores multiple lines of text.