1. Which type of Programming does Python support?  
   a) object-oriented programming  
   b) structured programming  
   c) functional programming  
   **d) all of the mentioned**
2. Which of the following is the correct extension of the Python file?  
   a) .python  
   b) .pl  
   **c) .py**  
   d) .p
3. Which of the following is used to define a block of code in Python language?  
   **a) Indentation**  
   b) Key  
   c) Brackets  
   d) All of the mentioned
4. Which keyword is used for function in Python language?  
   a) Function  
   **b) Def**  
   c) Fun  
   d) Define
5. Which of the following character is used to give single-line comments in Python?  
   a) //  
   **b) #**  
   c) !  
   d) /\*
6. Which of the following functions is a built-in function in python?  
   a) factorial()  
   **b) print()**  
   c) seed()  
   d) sqrt()
7. What will be the output of the following Python function?

Len([“hello”,1,2,3])

a) Error  
b) 6  
**c) 4**  
d) 3

1. What will be the output of the following Python statement?

“a” + “bc”

a) bc  
**b) abc**  
c) a  
d) bca

1. What arithmetic operators cannot be used with strings in Python?  
   a) \*  
   **b) –**  
   c) +  
   d) All of the mentioned
2. What will be the output of the following Python code?

Print(“abc. DEF”.capitalize())

1. **Abc. Def**
2. abc. Def
3. Abc. Def
4. ABC. DEF
5. Which of the following statements is used to create an empty set in Python?  
   a) ( )  
   b) [ ]  
   c) { }  
   **d) set()**
6. To add a new element to a list we use which Python command?  
   a) list1.addEnd(5)  
   b) list1.addLast(5)  
   **c) list1.append(5)**  
   d) list1.add(5)
7. What will be the output of the following Python code?

X = ‘abcd’

For I in range(len(x)):

Print(i)

a) error  
b) 1 2 3 4  
c) a b c d  
**d) 0 1 2 3**

1. What are the two main types of functions in Python?  
   a) System function  
   b) Custom function  
   **c) Built-in function & User defined function**  
   d) User function
2. Which of the following is a Python tuple?  
   a) {1, 2, 3}  
   b) {}  
   c) [1, 2, 3]  
   **d) (1, 2, 3)**
3. What will be the output of the following Python expression?

round(4.511)

a) 4  
b) 4.6  
**c) 5**  
d) 4.5

1. What is output of print(math.pow(3, 2))?  
   **a) 9.0**  
   b) None  
   c) 9  
   d) None of the mentioned
2. Which of the following will run without errors?  
   **a) round(45.8)**  
   b) round(6352.898,2,5)  
   c) round()  
   d) round(7463.123,2,1)
3. In order to store values in terms of key and value we use what core data type.  
   a) list  
   b) tuple  
   c) class  
   **d) dictionary**
4. Suppose t = (1, 2, 4, 3), which of the following is incorrect?  
   a) print(t[3])  
   b) **t[3] = 45**  
   c) print(max(t))  
   d) print(len(t))
5. Which of these about a set is not true?  
   a) Mutable data type  
   b) Allows duplicate values  
   c) Data type with unordered values  
   **d) Immutable data type**
6. Which of the following is not the correct syntax for creating a set?  
   **a) set([[1,2],[3,4]])**b) set([1,2,2,3,4])  
   c) set((1,2,3,4))  
   d) {1,2,3,4}
7. If a={5,6,7}, what happens when a.add(5) is executed?  
   a) a={5,5,6,7}  
   **b) a={5,6,7}**  
   c) Error as there is no add function for set data type  
   d) Error as 5 already exists in the set
8. Which of the following statements create a dictionary?  
   a) d = {}  
   b) d = {“john”:40, “peter”:45}  
   c) d = {40:”john”, 45:”peter”}  
   **d) All of the mentioned**
9. What will be the output of the following Python code snippet?

d = {"john":40, "peter":45}

a) “john”, 40, 45, and “peter”  
**b) “john” and “peter”**  
c) 40 and 45  
d) d = (40:”john”, 45:”peter”)

1. Suppose d = {“john”:40, “peter”:45}, to delete the entry for “john” what command do we use?  
   a) d.delete(“john”:40)  
   b) d.delete(“john”)  
   **c) del d[“john”]**  
   d) del d(“john”:40)
2. Which of the following is the use of function in python?  
   **a) Functions are reusable pieces of programs**  
   b) Functions don’t provide better modularity for your application  
   c) you can’t also create your own functions  
   d) All of the mentioned
3. Which of the following is not a declaration of the dictionary?  
   a) {1: ‘A’, 2: ‘B’}  
   b) dict([[1,”A”],[2,”B”]])  
   **c) {1,”A”,2”B”}**  
   d) { }
4. Which of these about a dictionary is false?  
   a) The values of a dictionary can be accessed using keys  
   **b) The keys of a dictionary can be accessed using values**  
   c) Dictionaries aren’t ordered  
   d) Dictionaries are mutable
5. Which of the following isn’t true about dictionary keys?  
   a) More than one key isn’t allowed  
   b) Keys must be immutable  
   **c) Keys must be integers**  
   d) When duplicate keys encountered, the last assignment wins
6. If a is a dictionary with some key-value pairs, what does a.popitem() do?  
   **a) Removes an arbitrary element**  
   b) Removes all the key-value pairs  
   c) Removes the key-value pair for the key given as an argument  
   d) Invalid method for dictionary
7. The function divmod(a,b), where both ‘a’ and ‘b’ are integers is evaluated as:  
   a) (a%b, a//b)  
   **b) (a//b, a%b)**  
   c) (a//b, a\*b)  
   d) (a/b, a%b)
8. Which of the following functions will not result in an error when no arguments are passed to it?  
   a) min()  
   b) divmod()  
   c) all()  
   **d) float()**
9. Suppose there is a list such that: l=[2,3,4]. If we want to print this list in reverse order, which of the following methods should be used?  
   a) reverse(l)  
   b) list(reverse[(l)])  
   c) reversed(l)  
   **d) list(reversed(l))**
10. Which of the following is the use of function in python?  
    **a) Functions are reusable pieces of programs**  
    b) Functions don’t provide better modularity for your application  
    c) you can’t also create your own functions  
    d) All of the mentioned

1. Which are the advantages of functions in python?  
   a) Reducing duplication of code  
   b) Decomposing complex problems into simpler pieces  
   c) Improving clarity of the code  
   **d) All of the mentioned**
2. Where is function defined?  
   a) Module  
   b) Class  
   c) Another function  
   **d) All of the mentioned**
3. What is called when a function is defined inside a class?  
   a) Module  
   b) Class  
   c) Another function  
   **d) Method**
4. Which of the following refers to mathematical function?  
   **a) sqrt**  
   b) rhombus  
   c) add  
   d) rhombus
5. What is a variable defined outside a function referred to as?  
   a) A static variable  
   **b) A global variable**  
   c) A local variable  
   d) An automatic variable
6. What is a variable defined inside a function referred to as?  
   a) A global variable  
   b) A volatile variable  
   **c) A local variable**d) An automatic variable
7. If a function doesn’t have a return statement, which of the following does the function return?  
   a) int  
   b) null  
   **c) None**  
   d) An exception is thrown without the return statemen
8. How many keyword arguments can be passed to a function in a single function call?  
   a) zero  
   b) one  
   **c) zero or more**  
   d) one or more
9. Which of the following data structures is returned by the functions globals() and locals()?  
   a) list  
   b) set  
   **c) dictionary**  
   d) tuple
10. On assigning a value to a variable inside a function, it automatically becomes a global variable.  
    a) True  
    **b) False**
11. Which is the most appropriate definition for recursion?  
    a) A function that calls itself  
    **b) A function execution instance that calls another execution instance of the same function**  
    c) A class method that calls another class method  
    d) An in-built method that is automatically called
12. Only problems that are recursively defined can be solved using recursion.  
    a) True  
    **b) False**
13. Which of the following statements is false about recursion?  
    a) Every recursive function must have a base case  
    b) Infinite recursion can occur if the base case isn’t properly mentioned  
    c) A recursive function makes the code easier to understand  
    **d) Every recursive function must have a return value**
14. Recursion and iteration are the same programming approach.  
    a) True  
    **b) False**
15. What happens if the base condition isn’t defined in recursive programs?  
    **a) Program gets into an infinite loop**  
    b) Program runs once  
    c) Program runs n number of times where n is the argument given to the function  
    d) An exception is thrown