Functions and Modules

1. Print ( ) is an
   (a) Built in function
   (b) User defined function
   (c) Both
   (d) None of the above

1.which of the following is an inbuilt function in python?

a. seed( )

b. sqrt( )

c. factorial( )

d. print( )

EXPLANATION: The function seed is a function which is present in the random module. The functions sqrt and factorial are a part of the math module. The print function is a built-in function which prints a value directly to the system output.

2. How many parameters can be declared within the function argument?
   (a) One
   (b) Two
   (c) Any number
   (d) None of the above

2. The function pow(x,y,z) is evaluated as:
   a. (x**Y)**z
   b. (x**y)/z
   c. (xy)%z**
   d. (x**y)*z

EXPLANATION: The built-in function pow() can accept two or three arguments. When it takes in two arguments, they are evaluated as: x**y. When it takes in three arguments, they are evaluated as: (x**y)%z.

3. def sum
   A=56
   B=55
   C=55
   Print ("the sum is", A+B+C)
   Sum ( )
   Spot the error in the above code

(a) First line
(b) Second line
(c) Fifth line
(d) None of the above

3. What is the output of the function shown below

```
all([2,4,0,6])
```

a. Error
b. True
c. False
d. 0

EXPLANATION: The function all returns false if any one of the elements of the iterable is zero and true if all the elements of the iterable are non-zero. Hence the output of this function will be false.

4.
```
def area (length, breadth):
Area=length*breadth
Print(Area)
area ( )
```
spot the error in the above function

(a) First line
(b) Second line
(c) Third line
(d) Fourth line

4. What is the output of the functions shown below?

```
min(max(False, -3,-4),2,7)
```

a. 2
b. False
c. -3
d. -4

EXPLANATION: The function max() is being used to find the maximum value from among -3, -4 and false. Since false amounts to the value zero, hence we are left with min(0, 2, 7) Hence the output is 0 (false).

Functions and Modules

5. 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

5. what is the output of the function complex( )?

   a. 0j
   b. 0+0j
   c. 0
   d. Error

   EXPLANATION: The complex function returns 0j if both of the arguments are omitted, that is, if the function is in the form of complex() or complex(0), then the output will be 0j.

6. Which keyword is used for function?
   (a) fun
   (b) define
   (c) def
   (d) function

   EXPLANATION: def is the python keyword to define a function

7. def fun( ):

   print ('hello')

   fun ( )

   what is the output to the function

   (a) Hello
   (b) "hello"
   (c) 'hello'
   (d) Hello

Formatted: Font color: Green

Functions and Modules

7. What is the output of the functions shown below?

```
float('1e-003')
float('2e+003')
```

a) 3.00
300

b) 0.001
2000.0

c) 0.001
200

d) Error
2003

EXPLANATION: The output of the first function will be 0.001 and that of the second function will be 2000.0. The first function created a floating-point number up to 3 decimal places and the second function adds 3 zeros after the given number.

8.
```
def area (length, breadth):
Area=length*breadth
Print(Area)
area (1,10)
```

What is the output to the above code

(a) 10
(b) 1
(c) 9
(d) None of the above

Functions and Modules

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()

EXPLANATION: The built-in functions min(), max(), divmod(), ord(), any(), all() etc throw an error when no arguments are passed to them. However there are some built-in functions like float(), complex() etc which do not throw an error when no arguments are passed to them. The output of float() is 0.0

9. Which of the following functions accepts only integers as arguments?
   (a) ord( )
   (b) min( )
   (c) chr( )
   (d) any( )

EXPLANATION: The function chr() accepts only integers as arguments. The function ord() accepts only strings. The functions min() and max() can accept floating point as well as integer arguments.

10. def sum ( ):

    A=56

    B=55

    C=55

    Print ("the sum is", A+B+C)

    Sum ( )

    (a) 166
    (b) 156
    (c) 176
    (d) None of the above

Functions and Modules

10.what is the output of the function shown below?

```
list(enumerate([2, 3]))
```

a. Error
b. [(1,2),(2,3)]
c. [(0,2),(1,3)]
d. [(2,3)]

EXPLANATION: The built-in function enumerate() accepts an iterable as an argument. The function shown in the above case returns containing pairs of the numbers given, starting from 0. Hence the output will be: [(0, 2), (1,3)].

11. 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))

11.Which of the following is a features of DocString?

a) Provide a convenient way of associating documentation with Python modules, functions, classes, and methods
b) All functions should have a docstring
c) Docstrings can be accessed by the __doc__ attribute on objects
d) All of the mentioned

EXPLANATION: Python has a feature called documentation strings, usually referred to by its shorter name docstrings. DocStrings are an important tool that you should make use of since it helps to document the program better and makes it easier to understand.

12. what is the output of the following code?

```
def find(a,  **b):
print(type(b))
find('letters' ,A='1' ,B='2')
```

(a) string
(b) Tuple
(c) Dictionary
(d) An exception is thrown

Explanation: b combines the remaining parameters into a dictionary.

Functions and Modules

13. Which of the following functions does not throw an error?
    (a) ord ( )
    (b) ord(' ')
    (c) ord('')
    (d) ord("")

EXPLANATION: The function ord() accepts a character. Hence ord(), ord('') and ord("") throw errors. However the function ord(' ') does not throw an error because in this case, we are actually passing a blank space as an argument. The output of ord(' ') is 32 (ASCII value corresponding to blank space).

14. len (["str",5,6,58])

    What is the output to the above function
    (a) 1
    (b) 2
    (c) 3
    (d) 4

EXPLANATION: The function len() returns the length of the number of elements in the iterable. Therefore the output of the function shown above is 4.

15. Complex of 3+4j
    (a) 7
    (b) 3+4j
    (c) 4+3j
    (d) None

15.what are the two main types of functions?

a. custom function

b. built-in function & user defined function

c. user function

d. system function

EXPLANATION: Built-in functions and user defined ones. The built-in functions are part of the Python language. Examples are: dir(), len() or abs(). The user defined functions are functions created with the def keyword.

Functions and Modules

16. Which of these definitions correctly describes a module?
    (a) Denoted by triple quotes for providing the specification of certain program elements
    (b) Design and implementation of specific functionality to be incorporated into a program
    (c) Defines the specification of how it is to be used
    (d) Any program that reuses code

16.where is function defined?

a. module

b. class

c. another function

d. all of the mentioned

EXPLANATION: Functions can be defined inside a module, a class or another function.

17. Which of the following isn't true about main modules?
    (a) When a python file is directly executed, it is considered main module of a program
    (b) Main modules may import any number of modules
    (c) Special name given to main modules is: __main__
    (d) Other main modules can import main modules

17.python supports the creation of anonymous functions at runtime, using a construct called

a. lambda

b. pi

c. anonymous

d. none of the mentioned

EXPLANATION: Python supports the creation of anonymous functions (i.e. functions that are not bound to a name) at runtime, using a construct called lambda. Lambda functions are restricted to a single expression. They can be used wherever normal functions can be used.

18. Which of the following is false about "import modulename" form of import?
    (a) The namespace of imported module becomes part of importing module
    (b) This form of import prevents name clash
    (c) The namespace of imported module becomes available to importing module

(d) The identifiers in module are accessed as: modulename.identifier

19. pandas is the
    (a) Built in module
    (b) User defined module
    (c) Both
    (d) None of the above

19. lambda is a statement

Formatted: Font color: Green

a. true

b. false

EXPLANATION: lambda is an anonymous function in Python. Hence this statement is false.

20. datetime is a
    (a) Built in module
    (b) User defined module
    (c) Both
    (d) Custom module

EXPLANATION: The datetime module supplies classes for manipulating dates and times in both simple and complex ways.