Course : IoT with Python

Python Test

Max Marks – 25 (Each question carries one mark)

1. What is the output of the following?

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
else:
    print(0)
```

a) 0 1 2 0
b) 0 1 2
c) error
d) none of the mentioned

2. What is the output of the following?

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

a) 0 1 2 3 0
b) 0 1 2 0
c) 0 1 2
c) error

3. What is the output of the following?

```
x = "abcdef"
while i in x:
    print(i, end=" ")
```

a) a b c d e f
b) abcdef
c) i i i i i i …
d) error

4. Which of the following commands will create a list?
a) list1 = list()
b) list1 = [].
c) list1 = list([1, 2, 3])
d) all of the mentioned

5. Suppose list1 is [4, 2, 2, 4, 5, 2, 1, 0], Which of the following is correct syntax for slicing operation ?
a) print(list1[0])
b) print(list1[:2])
c) print(list1[:-2])
d) all of the mentioned

6. Suppose list1 is [2, 33, 222, 14, 25], What is list1[-1] ?
a) Error
b) None
c) 25
d) 2

7. Suppose list1 is [2, 33, 222, 14, 25], What is list1[:-1] ?
a) [2, 33, 222, 14].
b) Error

c) 25
d) [25, 14, 222, 33, 2].

8. 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

9. 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) { }

10. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
for i,j in a.items():
  print(i,j,end=" ")
```

a) 1 A 2 B 3 C
b) 1 2 3
c) A B C
d) 1:”A” 2:”B” 3:”C”

11. What is the output of the following piece of code?

```
a={1:"A",2:"B",3:"C"}
print(a.get(1,4))
```

a) 1
b) A

c) 4
d) Invalid syntax for get method

12. 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

13. What are the two main types of functions?
a) Custom function
b) Built-in function & User defined function
c) User function
d) System function

14. What is called when a function is defined inside a class?
a) Module
b) Class
c) Another function
d) Method

15. What is the output of the below program ?

```
def C2F(c):
   return c * 9/5 + 32
print C2F(100)
print C2F(0)
```

a) 212
32
b) 314
24
c) 567

98
d) None of the mentioned

16. What is the output of the below program?

```
def sum(*args):
  '''Function returns the sum
  of all values'''
  r = 0
  for i in args:
    r += i
  return r
print sum.__doc__
print sum(1, 2, 3)
        print sum(1, 2, 3, 4, 5)
```

a) 6
15
b) 6
100
c) 123
12345
d) None of the mentioned

17. _____ represents an entity in the real world with its identity and behaviour.
a) A method
b) An object
c) A class
d) An operator

18. _____ is used to create an object.
a) class
b) constructor

c) User-defined functions
d) In-built functions

19. What is the output of the following code?

```
class test:
    def __init__(self,a="Hello World"):
        self.a=a

    def display(self):
        print(self.a)
obj=test()
obj.display()
```

a) The program has an error because constructor can't have default arguments
b) Nothing is displayed
c) "Hello World" is displayed
d) The program has an error display function doesn't have parameters

20. What is the output of the following code?

```
class Demo:
    def __init__(self):
        pass

    def test(self):
        print(__name__)

obj = Demo()
obj.test()
```

a) Exception is thrown
b) __main__

c) Demo
d) test

21. When will the else part of try-except-else be executed?
a) always
b) when an exception occurs
c) when no exception occurs
d) when an exception occurs in to except block

22. Is the following code valid?

```
try:
    # Do something
except:
    # Do something
finally:
    # Do something
```

a) no, there is no such thing as finally
b) no, finally cannot be used with except
c) no, finally must come before except
d) yes

23. What is the output of the following code?

```
def foo():
    try:
        return 1
    finally:
        return 2
k = foo()
print(k)
```

a) 1
b) 2

c) 3
d) error, there is more than one return statement in a single try-finally block

24. To open a file c:\scores.txt for reading, we use
a) infile = open(“c:\scores.txt”, “r”)
b) infile = open(“c:\\scores.txt”, “r”)
c) infile = open(file = “c:\scores.txt”, “r”)
d) infile = open(file = “c:\\scores.txt”, “r”)

25. What is the output?

```
1.f = None
2.for i in range (5):
3.    with open("data.txt", "w") as f:
4.        if i > 2:
5.            break
6.print(f.closed)
```

a) True
b) False
c) None
d) Error