Multiple Choice Questions

1. Which of the following is a mutable type?

a) Strings
b) Lists
c) Tuples
d) Frozenset

2. What will be the output of the following code?

```
t1 = (1, 2, 3, 4)

t1.append((5, 6, 7))

print(len(t1))
```

a) Error
b) 2
c) 1
d) 5

3. What is the correct syntax for creating a tuple?

a) ["a","b","c"]
b) ("a","b","c")
c) {"a","b","c"}
d) {}

4. Assume air_force = ("f15", "f22a", "f35a"). Which of the following is incorrect?

a) print(air_force[2])
b) air_force[2] = 42
c) print(max(air_force))
d) print(len(air_force))

5. Gauge the output of the following code snippet.

```
bike = ('d','u','c','a','t','i')

bike [1:3]
```

a) ('u', 'c')
b) ('u', 'c', 'c')
c) ('d', 'u', 'c')
d) ('a', 't', 'i')

6. What is the output of the following code?

```
colors = ("v", "i", "b", "g", "y", "o", "r")
```

```
for i in range(0, len(colors),2):
    print(colors[i])
```

a) ('i', 'b')
b) ('v', 'i', 'b')
c) ['v', 'b', 'y', 'r']
d) ('i', 'g', 'o')

7. What is the output of the following code snippet?

```
colors = ("v", "i", "b", "g", "y", "o", "r")
2 * colors
```

a) ['v', 'i', 'b', 'g', 'y', 'o', 'r']
b) ('v', 'i', 'b', 'g', 'y', 'o', 'r')
c) ('v', 'v', 'i', 'i', 'b', 'b', 'g', 'g', 'y', 'y', 'o', 'o', 'r', 'r')
d) ('v', 'i', 'b', 'g', 'y', 'o', 'r', 'v', 'i', 'b', 'g', 'y', 'o', 'r')

8. Predict the output of the following code.

```
os = ('w', 'i', 'n', 'd', 'o', 'w', 's')
os1 = ('w', 'i', 'n', 'd', 'w', 's', 'o')
os < os1
```

a) True
b) False
c) 1
d) 0

9. What is the data type of (3)?

a) Tuple
b) List
c) None
d) Integer

10. Assume tuple_1 = (7,8,9,10,11,12,13) then the output of tuple_1[1:-1] is.

a) Error
b) (8,9,10,11,12)
c) [8,9,10,11,12]
d) None

11. What might be the output of the following code:

```
A = ("hello") * 3
```

print(A)

a) Operator Error
b) ('hello','hello','hello')
c) 'hellohellohello'
d) None of these

12. What is the output of the following code:

```
number_1 = {1,2,3,4,5}

number_2 = {1,2,3}

number_1.difference(number_2)
```

a) {4, 5}
b) {1, 2, 3}
c) (4, 5)
d) [4, 5]

13. Judge the output of the following code:

```
tuples = (7,8,9)

sum(tuples, 2)
```

a) 26
b) 20
c) 12
d) 3

14. tennis = ('steffi', 'monica', 'serena', 'monica', 'navratilova')

```
tennis.count('monica')
```

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

15. A set is an _____ collection with no _____ items.

a) unordered, duplicate
b) ordered, unique
c) unordered, unique
d) ordered, duplicate

16. Judge the output of the following:

```
sets_1 = set(['a','b','b','c','c','c','d'])
```

len(sets_1)

a) 1
b) 4
c) 5
d) 7

17. What is the output of the code shown below?

```
s = {1,2,3}

s.update(4)

print(s)
```

a) {1,2,3,4}
b) {1,2}
c) {1,2,3}
d) Error

18. Tuple unpacking requires

a) an equal number of variables on the left side to the number of items in the tuple.
b) greater number of variables on the left side to the number of items in the tuple.
c) less number of variables on the left side to the number of items in the tuple.
d) Does not require any variables.

19. The statement that is used to create an empty set is

a) {}
b) set()
c) []
d) ()

20. The _____ functions removes the first element of the set

a) remove()
b) delete()
c) pop()
d) truncate()

21. The method that returns a new set with items common to two sets is

a) isdisjoint()
b) intersection()
c) symmetric_difference()
d) union()

22. What is the output of the following code snippet?

```
s1 = {'a','b','c'}
 s2 = {'d'}
 print(s1.union(s2))
```

a) {'c', 'd', 'b', 'a'}
b) {'a', 'b', 'c', 'd'}
c) {'b', 'c', 'd', 'a'}
d) {'d', 'a', 'b', 'c'}

23. The function that makes a sequence by aggregating the elements from each of the iterables is

a) remove()
b) update()
c) frozenset()
d) zip()

24. Predict the output of the following code:

```
even = {'2', '4', '6'}
odd = {'1', '5', '7 '}
even.isdisjoint(odd)
odd.isdisjoint(even)
```

a) True False
b) False True
c) True True
d) False False

25. Which of the following code snippet returns symmetric difference between two sets

a) x ^ y
b) x & y
c) x | y
d) x – y