

Name _____ grade _____

1) Create an empty set _____ [1]

2) Write the result for following program code:

```
my_set_3 = set("aaabbbcccdddeeeeffff")  
print(my_set_3)
```

_____ [1]

3) Write an operator to add an element to the set.

_____ [1]

4) Explain the purpose of the operators: remove and discard, determine the difference.

_____ [2]

5) Given a set: banana, orange, apple. If the set contains the word "apple", show on the screen - True, otherwise - False.

_____ [4]

6) Given a set: banana, orange, apple and the program code:

```
for i in my_set:
```

```
    print(i)
```

Show the result.

_____ [1]

7) Explain the operator: $u=m1.union(m2)$. Give one example, show sets and result.

_____ [2]

8) Given sets: odds: 1,3,5,7,9; evens: 0,2,4,6,8; primes: 2,3,5,7.
Show the result.

```
i=odds.intersection(evens)
print(i)
i=odds.intersection(primes)
print(i)
i=evens.intersection(primes)
print(i)
```

[3]

9) Explain what does mean Symmetric difference of sets.

[1]

10) Given setA: 1,2,3,4,5,6,7,8,9; setB: 1,2,3,10,11,12.

Show the result for program code:

```
diff_set=setA.symmetric_difference(setB)
print(diff_set)
diff_set=setB.symmetric_difference(setA)
print(diff_set)
```

[1]

11) Explain the purpose of the operators:
issubset(setX)

issuperset(setX)

isdisjoint(setX)

[3]

12) Define the type of data which return issubset, issuperset, isdisjoint.

[1]