**Python Logical Operator Questions**

**1.**

a=10

b=5

print(a>3 and b<10)

**output:** True

2.

x=7

print(not(x<10))

output: False

3.

x=4

y=12

print(x<5 or y<10)

**output:** True

4.

age=18

has\_id=False

print(age>=18 and has\_id)

**output:** False

5.

logged\_in=True

admin=False

print(logged\_in or admin)

**output:** True

6.

is\_sunny=False

have\_umbrella=True

print(not is\_sunny and have\_umbrella)

**output:** True

7.

a=True

b=False

print(not(a or b))

**output:** False

8.

temp=25

print(temp>20 and temp<30)

**output:** True

9.

marks=45

print(not(marks >=50 or marks ==49))

**output:** True

10.

X=0

Y=10

Print(not x and y>5)

**output:**True

**Python Logical, Membership, Comparison, and Assignment Operator Questions**

**Complex Operator Code Snippets (All Operators Used)**

1.

x = 15

y = 10

z = 5

x += 5

print ((x > y or z in [5, 6]) and not (x == 20))

**output:true**

2.

username = "admin"

roles = ["user", "editor", "admin"]

access\_granted = username in roles and username != "guest"

print(access\_granted)

**output:true**

3.

marks = 85

status = "Pass" if marks >= 40 else "Fail"

print(status == "Pass" and marks in range(80, 91))

**output:true**

4.

items = ["pen", "book", "bottle"]

available = "bottle" in items

stock = 10

stock -= 1

print(available and stock != 0)

**output:true**

5.

x = 5

y = 5

z = 0

1

x \*= 2

print(x == 10 and (y in [1, 5]) or not z)

**output:true**

6.

age = 25

id\_card = True

is\_verified = False

is\_verified = age >= 18 and id\_card

print(is\_verified and not (age < 18))

**output:true**

7.

login = True

admin = False

privileges = ["read", "write"]

print(("delete" not in privileges) and (login or admin))

**output:true**

8.

x = 8

y = 12

x %= 5

y //= 3

print(x != y and (x not in [0, 1]))

**output:true**

9.

students = ["Asha", "Ravi", "Mira"]

marks = {"Asha": 78, "Ravi": 65}

print("Mira" in students and students[0] in marks)

**output:true**

10.

x = 100

y = 50

x -= 50

y += 10

print((x == y) or (x > y and "Python" not in ["Java", "C++"]))

**output:false**

**2 Comparison Operator Examples**

1.

a = 10

b = 20

print(a != b)

**output:true**

2.

x = 30

y = 30

print(x == y)

**output:true**

3.

age = 18

print(age >= 18)

**output:true**

4.

a = 50

b = 100

print(a < b)

**output:true**

5.

score = 75

print(score >= 60 and score <= 90)

**output:true**

**Logical Operator Examples**

1.

a = True

b = False

print(a and b)

**output:false**

2.

x = 10

y = 20

print(x < 15 or y > 25)

**output:true**

3.

flag = False

print(not flag)

**output:true**

4.

marks = 70

print(marks > 60 and marks < 80)

**output:true**

5.

has\_ticket = True

is\_vip = False

print(has\_ticket or is\_vip)

**output:true**

**Assignment Operator Examples**

1.

x = 5

x += 2

print(x)

**output:7**

2.

count = 10

count -= 3

print(count)

**output:7**

3.

value = 6

value \*= 3

print(value)

**output:18**

4.

num = 40

num //= 4

print(num)

**output:10**

5.

val = 9

val %= 2

print(val)

**output:1**

**Membership Operator Examples**

1.

colors = ["red", "green", "blue"]

print("red" in colors)

**output:true**

2.

text = "hello world"

print("world" in text)

**output:true**

3.

students = ["Tom", "Jerry"]

print("Spike" not in students)

**output:true**

4.

chars = "abcdef"

print("g" not in chars)

**output:true**

5.

numbers = [1, 2, 3, 4, 5]

print(3 in numbers)

**output:true**