■ Week 1 – Python Quiz

Part A – Multiple Choice Questions (MCQ)

1. Which data type is immutable?

Answer: Tuple

2. Which of these is not a valid variable name?

Answer: 1name

3. What will type(3.0) return?

Answer:

4. Which operator is used for logical AND?

Answer: and

5. What will len(['a', 'b', 'c']) return?

Answer: 3

Part B - True / False

6. append() method can be used with tuples.

Answer: False

7. In Python, == compares values while is compares memory location.

Answer: True

8. Sets allow duplicate values.

Answer: False

9. input() function always returns a string.

Answer: True

10. Dictionary keys must be immutable.

Answer: True

Part C – Output Prediction

```
x = [1, 2, 3]
x.append([4, 5])
print(len(x))
Answer: 4

12.
for i in range(2, 6):
    print(i, end=' ')
Answer: 2 3 4 5

13.
def add(a, b=2):
    return a + b
print(add(3))
Answer: 5
```

```
14.
fruits = ('apple', 'banana', 'mango')
print(fruits[1])
Answer: banana

15.
A = {1, 2, 3}
B = {3, 4, 5}
print(A & B)
Answer: {3}
```

Part D – Short Coding Questions

```
16. Function to check even number
def is_even(num):
    return num % 2 == 0
17. List of 5 student names & print first + last
students = ['Ali', 'Sara', 'Ahmed', 'Hina', 'Usman']
print(students[0])
print(students[-1])
18. Check age for Adult/Minor
age = int(input('Enter your age: '))
if age >= 18:
    print('Adult')
else:
    print('Minor')
19. Dictionary update
person = {'name': 'Ali', 'age': 21, 'city': 'Lahore'}
person['city'] = 'Karachi'
print(person)
20. Union of two sets
A = \{1, 2, 3\}
B = \{3, 4, 5\}
print(A | B) # Union
# Answer: {1, 2, 3, 4, 5}
```