

## Category 2: Parameter Passing & Variable Scope – Q21 to Q35

### Q21. What is printed?

```
function modify(x)
    x = x + 10
    return x
```

```
a = 5
modify(a)
print(a)
```

### Q22. Output?

```
function update(arr, i)
    arr[i] = arr[i] + 5
```

```
arr = [1, 2, 3]
update(arr, 1)
print(arr[1])
```

### Q23. Output of the code:

```
x = 100
```

```
function check()
    x = 50
    print(x)
```

```
check()
print(x)
```

### Q24. What will be the output?

```
a = 10
```

```
function test()
    global a
    a = a + 5
```

```
test()
print(a)
```

### Q25. Trace the output:

```
function modify(x)
```

```
x = x * 2  
return x
```

```
x = 4  
x = modify(x)  
print(x)
```

**Q26. What is printed?**

```
x = 5
```

```
function demo(x)  
    x = x + 1  
    print(x)
```

```
demo(x)  
print(x)
```

**Q27. Predict the output:**

```
function add(val)  
    val = val + 10
```

```
a = 3  
add(a)  
print(a)
```

**Q28. What will be the output?**

```
function fun(x)  
    y = x + 10  
    return y
```

```
y = 5  
z = fun(y)  
print(y, z)
```

**Q29. Scope analysis – What's printed?**

```
x = 1

function outer()
  x = 2
  function inner()
    print(x)
  inner()

outer()
```

**Q30. Output?**

```
x = 10

function show()
  print(x)
  x = 20

show()
```

**Q31. Predict the result:**

```
function increment(x)
  x = x + 1
  return x

a = increment(2)
b = increment(a)
print(b)
```

**Q32. What's the final value of x?**

```
x = 10
function change()
  x = x + 5

change()
print(x)
```

**Q33. Trace this code:**

```
val = 2
```

```
function mul()  
    val = val * 2  
    return val
```

```
print(mul())
```

**Q34. Output of this recursive update:**

```
function recUpdate(a)  
    if a > 10  
        return a  
    return recUpdate(a + 2)
```

```
print(recUpdate(4))
```

**Q35. What is printed?**

```
function f(a, b)  
    a = a + b  
    b = a - b  
    a = a - b  
    print(a, b)
```

```
x = 3
```

```
y = 5
```

```
f(x, y)
```

```
print(x, y)
```