

## Set 1: Recursion with Statement *After* Recursive Calls (Unwinding Phase)

Focus: Understanding how the control flows after the base case is hit.

### MCQ 1: Basic Print After Recursion

```
function show(n):  
    if n == 0:  
        return  
    show(n - 1)  
    print(n)
```

show(3)

#### Output?

- A) 3 2 1
- B) 1 2 3
- C) 0 1 2
- D) 0 2 3

### MCQ 2: Two Recursive Calls, Post Statement

```
function recur(n):  
    if n == 0:  
        return  
    recur(n - 1)  
    recur(n - 1)  
    print(n)
```

recur(2)

#### Output?

- A) 1 1 2
- B) 2 1 1
- C) 1 2 2
- D) 1 2 1

### MCQ 3: Reverse Print with Array

```
arr = [4, 5, 6]  
function reversePrint(i):  
    if i == length(arr):  
        return  
    reversePrint(i + 1)  
    print(arr[i])
```

reversePrint(0)

#### Output?

- A) 4 5 6
- B) 6 5 4

- C) 6 4 5
- D) 5 6 4

#### MCQ 4: Factorial with Print

```
function fact(n):  
    if n == 1:  
        return 1  
    result = n * fact(n - 1)  
    print(result)  
    return result
```

```
fact(4)
```

#### Output?

- A) 4 3 2
- B) 2 6 24
- C) 24 6 2
- D) 2 3 4

#### MCQ 5: Sum Accumulator

```
function sum(n, total):  
    if n == 0:  
        print(total)  
        return  
    sum(n - 1, total + n)  
    print(n)
```

```
sum(3, 0)
```

#### Output?

- A) 6 3 2 1
- B) 0 1 2 3
- C) 3 2 1 6
- D) 6 1 2 3