

Pseudocode Questions file 5

Dated 22-10-2025

Q1. What will be the output of the following Pseudocode?

Decrementing Inner loop

```
val = 0
FOR i = 5 DOWNTO 1
    FOR j = i DOWNTO 1
        val = val + 1
    END FOR
END FOR
PRINT val
```

Q2. What will be the output of the following Pseudocode?

Nested Loops with Continue

```
count =0
FOR i = 1 TO 4
    FOR j = 1 TO 4
        IF (i = j) THEN
            CONTINUE
        END IF
        count = count + 1
    END FOR
END FOR
PRINT count
```

Q3. What will be the output of the following Pseudocode?

Breaking from Inner Loop

```
total = 0
FOR i = 1 TO 5
    FOR j = 1 TO 5
        IF j = 3 THEN
            BREAK
        END IF
        total = total + 1
    END FOR
END FOR
PRINT total
```

Q4. What will be the output of the following pseudocode?

Complex loop condition

```
x = 0
FOR i = 2 TO 5
    FOR j = 1 TO i
        FOR k = 1 TO j
            x = x + 1
        END FOR
    END FOR
END FOR
PRINT x
```

Q5. What will be the output of the following pseudocode?

Pattern Tracing

```
sum = 0
FOR i = 1 TO 3
    FOR j = 1 TO 3
        IF (i + j) MOD 2 = 0 THEN
            sum = sum + 1
        END IF
    END FOR
END FOR
PRINT sum
```

Q6. What will be the output of the following pseudocode?

Variable modifications inside loop

```
x = 1
FOR i = 1 TO 4
    FOR j = 1 TO i
        x = x + i * j
    END FOR
END FOR
PRINT x
```

Q7. What will be the output of the following pseudocode?

Dynamic Loop Bound

```
count = 0
FOR i = 1 TO 4
    FOR j = i TO (i * 2)
        count = count + j
    END FOR
END FOR
PRINT count
```

Q8. What will be the output of the following Pseudocode?

Nested Loop with condition based on Indices

```
res = 0
FOR i = 1 TO 5
    FOR j = 1 TO 5
        IF (i * j) MOD (i + j) = 0 THEN
            res = res + 1
        END IF
    END FOR
END FOR
PRINT res
```

Q9. What will be the output of the following pseudocode?

Inner Loop affects outer variable

```
total = 0
FOR i = 1 TO 3
    FOR j = 1 TO 3
        i = i + 1
        total = total + i + j
    END FOR
END FOR
PRINT total
```

Q10. What will be the output of the following pseudocode?

Triple nested loop with conditional skip

```
cnt = 0
FOR i = 1 TO 3
    FOR j = 1 TO 3
        FOR k = 1 TO 3
            IF (i + j + k) MOD 2 = 0 THEN
                CONTINUE
            END IF
            cnt = cnt + 1
        END FOR
    END FOR
END FOR
PRINT cnt
```

Q11. What will be the output of the following pseudocode?

Loop with Break and Continue Mixed

```
num = 0
FOR i = 1 TO 5
    FOR j = 1 TO 5
        IF (j MOD 2 = 0) THEN
            CONTINUE
        END IF
        IF (i + j > 7) THEN
            BREAK
        END IF
        num = num + 1
    END FOR
END FOR
PRINT num
```

Q12. What will be the output of the following Pseudocode?

Non-Uniform Loop Increments

```
sum = 0
FOR i = 1 TO 5 STEP 2
    FOR j = i TO 5 STEP 2
        sum = sum + i * j
    END FOR
END FOR
PRINT sum
```

Q13. What will be the output of the following Pseudocode?

Exponential Growth inside loop

```
val = 1
FOR i = 1 TO 4
    FOR j = i TO 1
        val = val * 3
    END FOR
END FOR
PRINT val
```

Q14. What will be the output of the following Pseudocode?

```
total = 0
FOR i = 1 TO 4
    limit = i + 1
    FOR j = 1 TO limit
        total = total + (i * j)
        limit = limit - 1
    END FOR
END FOR
PRINT total
```

Q15. What will be the output of the following Pseudocode?

Breaking outer loop from inner loop

```
count = 0
FOR i = 1 TO 5
    FOR j = 1 TO 5
        IF (i * j) > 12 THEN
            BREAK OUTER
        END IF
        count = count + 1
    END FOR
END FOR
PRINT count
```