Pseudocode Questions file 2

Dated 19-10-2025

Q1. What will be the values after execution?

```
int main()
 {
        int x = 5, y = 10;
        x = x ^ y;
        y = x ^ y;
        x = x ^ y;
        printf("%d %d", x, y);
        return 0;
}
```

A) 5 10

B) 10 5

C) 15 5

D) 0 15

Q2. What will be the output?

```
int main()
 {
        int i = 5;
        printf("%d ", i--);
        printf("%d ", --i);
        printf("%d", i);
        return 0;
}
```

A) 5 4 3

B) 5 3 3

C) 4 3 3

D) 5 3 3

Q3. What will be the output?

```
int main()
{
        int x = 1;
                switch(x)
                 {
                case 1:
                printf("One ");
                case 2:
                printf("Two ");
                default:
                printf("Default");
                }
return 0;
}
```

A) One

B) Two

C) One Two Default

D) Default

Q4. What will be the output if input is "Hello World"?

```
int main()
{
        char str1[10], str2[10];
        scanf("%s %s", str1, str2);
        printf("%s-%s", str1, str2);
        return 0;
}
```

A) Hello World

B) Hello-World

C) Hello World-Hello World

D) Error

Q5. What is the difference between these declarations?

int arr1[] = {1, 2, 3, 4, 5}; // Declaration 1

int arr2[5] = {1, 2, 3}; // Declaration 2

A) Both same

B) arr1 has 5 elements, arr2 has 3 elements

C) arr1 has 5 elements, arr2 has 5 elements (last two are 0)

D) Compilation error in arr2

Q6. Analyse this accumulator:

```
BEGIN
    total = 0
    multiplier = 1
    FOR i = 1 TO 4
        total = total + (i * multiplier)
        multiplier = multiplier * 2
    END FOR
    PRINT total
END
```

A) 15 B) 20 C) 49 D) 30

Q7. Determine the output:

```
BEGIN
    value = 100
    WHILE value > 1
        IF value % 2 == 0
            value = value / 2
        ELSE
            value = value * 3 + 1
        END IF
    END WHILE
    PRINT value
END
```

A) 0 B) 1 C) 2 D) 4

Q8. What does this nested structure produce?

```
BEGIN
    result = 0
    FOR outer = 1 TO 3
        FOR inner = outer TO 3
            result = result + (outer * inner)
        END FOR inner
    END FOR outer
    PRINT result
END
```

A) 25 B) 30 C) 35 D) 40

Q9. Analyse this complex loop:

```
BEGIN
    sum = 0
    i = 1
    WHILE i <= 10
        j = i
        WHILE j <= 10
            sum = sum + 1
            j = j + 2
        END WHILE
        i = i + 1
    END WHILE
    PRINT sum
END
```

A) 35 B) 30 C) 40 D) 45

Q10. Determine the result:

```
BEGIN
    total = 0
    FOR i = 1 TO 4
        subtotal = 0
        FOR j = 1 TO i
            subtotal = subtotal + j
        END FOR j
        total = total + subtotal
    END FOR i
    PRINT total
END
```

A) 20 B) 25 C) 30 D) 35

Q11. Analyse this pattern:

```
BEGIN
    value = 0
    FOR i = 1 TO 3
        FOR j = 1 TO 3
            IF i == j
                value = value + (i + j)
            ELSE
                value = value + 1
            END IF
        END FOR j
    END FOR i
    PRINT value
END
```

A) 15 B) 18 C) 21 D) 24

Q12. Determine the final value:

```
BEGIN
    result = 0
    FOR level1 = 1 TO 3
        FOR level2 = level1 TO 4
            result = result + (level1 * level2)
        END FOR level2
    END FOR level1
    PRINT result
END
```

A) 50 B) 55 C) 49 D) 65

Q13. What will this string operation produce?

```
BEGIN
    text = "HELLO"
    result = ""
    FOR i = 1 TO LENGTH(text)
        char = SUBSTRING(text, i, 1)
        result = char + result
    END FOR
    PRINT result
END
```

A) HELLO B) OLLEH C) HLLEO D) EOLLH

Q14. Analyse this character counting:

```
BEGIN
    word = "PROGRAMMING"
    vowel_count = 0
    FOR i = 1 TO LENGTH(word)
        char = SUBSTRING(word, i, 1)
        IF char IN ["A", "E", "I", "O", "U"]
            vowel_count = vowel_count + 1
        END IF
    END FOR
    PRINT vowel_count
END
```

A) 2 B) 3 C) 4 D) 5

Q15. Determine the output:

```
BEGIN
 a = 4
 b = 0
 c = 2
 IF (a > 3) AND (b != 0) AND ((a / b) > c)
  PRINT "Pass"
 ELSE
  PRINT "Fail"
 END IF
END
```

A) Pass B) Fail C) ERROR D) None