

**Pseudocode Questions file 6**

**Dated 23-10-2025**

**Q1. What will be the output of the following pseudocode for input a =30, b =60, c =90?**

```
Integer a, b, c, sum
Read a, b, c
Set sum = a + b + c
if ((sum EQUALS 180) and (a NOT EQUALS 0) and (b NOT EQUALS 0) and
(c NOT EQUALS 0))
    Print " Success"
otherwise
    Print "Fail"
End if
```

**Q2. Determine the output:**

```
BEGIN
a = 8
b = 2
c = 5
IF ((a / b) + c == 9) AND ((a % c) < b)
    IF (a - c == b * b)
        PRINT "P"
    ELSE
        PRINT "Q"
    END IF
ELSE
    IF (a + b + c) % 2 == 1
        PRINT "R"
    ELSE
        PRINT "S"
    END IF
END IF
END
```

A) P   B) Q   C) R   D) S

**Q3. Determine the output:**

```
BEGIN
  x = 3
  y = 4
  z = 2
  result = 0
  FOR i = 1 TO z
    result = result + (x * i) - (y // i)
  END FOR
  PRINT result
END
```

A) 1   B) 2   C) 3   D) 4

**Q4. Determine the output:**

```
BEGIN
  a = 5
  b = 10
  c = 20
  IF ((b - a) * 2 == a) OR ((c / b) == 2)
    IF (c % a == 0)
      PRINT "Yes"
    ELSE
      PRINT "No"
    END IF
  ELSE
    PRINT "Maybe"
  END IF
END
```

A) Yes   B) No   C) Maybe   D) ERROR

**Q5. Determine the output:**

```
BEGIN
  x = 7
  y = 2
  z = 3
  IF ((x * y) % z == 2) AND ((x + y + z) % 4 == 0)
    IF (x - y == z * y)
      PRINT "Right"
    ELSE
      PRINT "Wrong"
    END IF
  ELSE
    PRINT "None"
  END IF
END
```

A) Right B) Wrong C) None D) ERROR

**Q6. Determine the output:**

```
BEGIN
  a = 5
  b = 3
  c = a ^ b << 1 & 7
  d = ~c | a
  PRINT d
END
```

A) -3 B) -1 C) -2 D) -4

**Q7. What will be the output?**

```
int main()
{
    int a = 10, b = 5;
    int result = (a > b) && (b > 0);
    printf("%d", result);
    return 0;
}
```

A) 10

B) 5

C) 0

D) 1

**Q8. What will be the total size?**

```
int main() {
    char text[20] = "Hello";
    printf("%d", sizeof(text));
    return 0;
}
```

A) 20

B) 5

C) 6

D) 21

**Q9. What will be the output?**

```
int main()
{
    short s = 100;
    int i = 200;
    float f = s + i;
    printf("%.1f", f);
    return 0;
}
```

- A) 300
- B) 300.0
- C) 300.0
- D) 30.0

**Q10. What will be the output?**

```
int main()
{
    int m = 25, n = 15;
    int result = (m > n) ? m - n : n - m;
    printf("%d", result);
    return 0;
}
```

- A) 40
- B) 10
- C) 25
- D) 15

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

```
Integer p, q, r
Set p =7, q =4, r = 5
if ((p+r) < (q-p) || r<p)
r = q&p
r = (r+3)&p
End if
Print p+q+r
```

**Q12. What will be the output of the following pseudocode for a =4, b = 6?**

```
Integer fun (Integer a, Integer b)
a = a<<(a-2)
b = b>>(b-5)
a = a+1
b = b+1
return a+b
End function fun()
```

**Q13. What will be the output of the following pseudocode?**

```
Integer p, q, r
Set p =8, q =6, r = 5
for (each r from 5 to 8)
p = (6&3) +r
if(4<q)
p = 3 + r
q = q+ q
end if
end for
print p+q
```

**Q14. What will be the output of the following pseudocode?**

```
Integer a, b, c
Set a = 6, b = 4, c = 6
for (each c from 3 to 7)
    if ((b + a + c) > (c + b))
        Continue
    End if
    b = 5 + c
    a = a + a
end for
print a+b
```

**Q15. What will be the output of the following pseudocode?**

```
Integer x, y
Set x = 15, y = 12
y = x - 1
do{
    Print x
    x = y + (x - 2)
}
while(x < 40)
end do while
```



**Q24. What will be the output for this search algorithm?**

```
int exponential_search(int arr[], int n, int target)
{
    if(arr[0] == target) return 0;
    int i = 1;
    while(i < n && arr[i] <= target)
        i *= 2; // Then binary search would be called
    return i/2; // Simplified to return the bound
}

int main()
{
    int sorted_data[] = {1, 3, 5, 7, 9, 11, 13, 15, 17, 19};
    printf("%d", exponential_search(sorted_data, 10, 13));
    return 0;
}
```

- A) 4
- B) 8
- C) 8
- D) 6

**Q25. What potential issue exists in this memory reallocation?**

```
int main()
{
    int original = (int)malloc(5 * sizeof(int));
    int expanded = (int)realloc(original, 10 * sizeof(int));
}
```

- A) No issue
- B) Memory leak if realloc fails
- C) Double free
- D) Proper handling

