**1. What is the primary purpose of access specifiers in C++?**

A. To specify the data type of a variable.

B. To control the access to class members.

C. To define a constant value.

D. To declare a static member.

E. To allocate memory dynamically.

**2. What is the purpose of a constant member function in a C++ class?**

A. To define a static member.

B. To create constant objects of the class.

C. To allow modification of class data members.

D. To prevent modification of class data members.

E. To create friend functions.

**3. When passing an object as an argument to a function in C++, which method provides the most efficient way to pass the object and modify its content within the function?**

A. Pass by value

B. Pass by reference

C. Pass by address

D. Pass by pointer

E. Pass by constant reference

**4.What is the purpose of a static object in C++?**

A. To create an instance of a class that cannot be modified.

B. To allocate memory on the heap.

C. To access class members without creating an instance of the class.

D. To declare a constant object.

E. To define a friend class.

**5.In C++, when is it appropriate to return an object from a function?**

A. Only when the object is declared as a constant.

B. Only when the object is a global variable.

C. When the object is a local variable within the function.

D. When the object is dynamically allocated using new.

E. When the object's data members are all private.

**6.In C++, what is the arrow operator (->) primarily used for when working with class objects?**

a) Incrementing object values

b) Accessing class methods

c) Performing logical operations

d) Accessing members of an object through a pointer

e) Comparing objects

**7.Given the recursive C++ function below:**

**int ackermann(int m, int n) {**

**if (m == 0) {**

**return n + 1;**

**} else if (n == 0) {**

**return ackermann(m - 1, 1);**

**} else {**

**return ackermann(m - 1, ackermann(m, n - 1));**

**}**

**}**

**What is the value of ackermann(2, 3)?**

a. 7

b. 29

c. 9

d. 21