35 Lecture - CS304

Important Mcqs

1. **What are member templates in C++?**
   A. Templates defined inside a class or struct
   B. Templates defined outside a class or struct
   C. Templates that cannot be used with any data type
   D. Templates that can only be used with integer data types
   Answer: A. Templates defined inside a class or struct.

   What is the advantage of using member templates?
   A. Increased reusability and adaptability of code
   B. Improved code performance
   C. Reduced code complexity
   D. All of the above
   Answer: D. All of the above.

   Can member templates access the data members and methods of the class they are defined in?
   A. Yes
   B. No
   Answer: A. Yes.

   Can member templates be used to provide generic constructors?
   A. Yes
   B. No
   Answer: A. Yes.

   What is the syntax for defining a member template?
   A. template<class T> void myFunction(T arg);
   B. template<typename T> void myFunction(T arg);
   C. template<class T> struct MyClass {...};
   D. All of the above
   Answer: D. All of the above.

   Can member templates be specialized for specific data types?
   A. Yes
   B. No
   Answer: A. Yes.

   What is the purpose of a member function template?
   A. To provide a generic member function that can work with any data type
   B. To provide a specialized member function for a specific data type
   C. To provide a constructor for a class or struct
   D. None of the above
   Answer: A. To provide a generic member function that can work with any data type.

   What is the advantage of using a member function template over a regular member

function?
A. Increased reusability and adaptability of code
B. Improved code performance
C. Reduced code complexity
D. All of the above
Answer: D. All of the above.

What is the difference between a member function template and a regular member function?
A. A member function template can work with any data type, whereas a regular member function can only work with specific data types
B. A member function template is defined inside a class or struct, whereas a regular member function is defined outside the class or struct
C. A member function template cannot access the data members and methods of the class it is defined in, whereas a regular member function can
D. None of the above
Answer: A. A member function template can work with any data type, whereas a regular member function can only work with specific data types.

What is the purpose of template specialization?
A. To provide a generic template that can work with any data type
B. To provide a specialized template for a specific data type
C. To provide a constructor for a class or struct
D. None of the above
Answer: B. To provide a specialized template for a specific data type.