41 Lecture - CS201

Important Mcqs

1. **What is a template function?**
   a) A function that only works with one specific data type
   b) A function that can work with multiple data types
   c) A function that is used to create classes
   d) A function that is only used in object-oriented programming

Answer: b

2. **What is the syntax for declaring a template function in C++?**
   a) template<typename T> void functionName(T arg);
   b) void functionName<T>(T arg);
   c) template<T> void functionName(T arg);
   d) typename T void functionName(T arg);

Answer: a

3. **What is the purpose of a template function?**
   a) To create a specialized function for a specific data type
   b) To create a function that can work with multiple data types
   c) To create a function that is used for input/output operations
   d) To create a function that is used for debugging purposes

Answer: b

4. **How does a template function differ from a regular function?**
   a) A template function can only work with one data type
   b) A template function cannot be called directly
   c) A template function can work with multiple data types
   d) A template function does not need a return type

Answer: c

5. **What is a template parameter?**
   a) A variable used to hold data
   b) A type used to represent a data type in a template function
   c) A function used to manipulate data
   d) A value that is returned by a function

Answer: b

6. **Can template functions be overloaded?**
   a) Yes
   b) No

Answer: a

7. **What is a template specialization?**
   a) A way to create a specialized version of a template function for a specific data type
   b) A way to create a template function that works with all data types
   c) A way to create a function that cannot be used with templates
   d) A way to create a function that can only be used with templates

Answer: a

8. **What is a non-type template parameter?**
   a) A variable used to hold data
   b) A type used to represent a data type in a template function
   c) A value used to represent a constant in a template function
   d) A function used to manipulate data

Answer: c

9. **Can templates be used with classes?**
   a) Yes
   b) No

Answer: a

10. **What is the benefit of using template functions?**
    a) Reduced development time
    b) Increased compilation time
    c) Limited functionality
    d) Limited reusability

Answer: a