

41 Lecture - CS201

Important Subjective

- 1. What is a template function in C++?**

A template function is a function that is designed to work with multiple data types by using template parameters.
- 2. How do you declare a template function in C++?**

You declare a template function by using the keyword "template" followed by the template parameter list and the function declaration.
- 3. What is the purpose of a template parameter?**

A template parameter is used to represent a data type or a constant value that can be used by the template function.
- 4. How does template specialization work in C++?**

Template specialization is a way to create a specialized version of a template function for a specific data type or value.
- 5. What is a non-type template parameter in C++?**

A non-type template parameter is a value that is used as a template argument, but is not a data type.
- 6. How does template argument deduction work in C++?**

Template argument deduction is the process of determining the data types of template arguments based on the function arguments.
- 7. How do you overload a template function in C++?**

You can overload a template function by defining a new function with the same name but different template parameters.
- 8. What is the difference between a function template and a class template in C++?**

A function template is a template function, whereas a class template is a template class that can contain member functions and data.
- 9. What are the advantages of using template functions in C++?**

Template functions provide code reusability, reduce development time, and allow for generic programming.
- 10. What are the potential drawbacks of using template functions in C++?**

Template functions can lead to longer compilation times, increased complexity, and can be difficult to understand for novice programmers.