

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