## 38 Lecture - CS304

### **Important Subjective**

### 1. What is function template overloading in C++?

Answer: Function template overloading is a technique in C++ that allows programmers to define multiple functions with the same name but different argument types.

### How is function template overloading achieved in C++?

Answer: Function template overloading is achieved by defining a function template with placeholders for argument types that can be instantiated with different types at compile time.

### What is the purpose of function template overloading?

Answer: The purpose of function template overloading is to improve code flexibility and reusability by creating a single function that can be used with different data types.

### Can function templates be overloaded based on the return type?

Answer: No, function templates cannot be overloaded based on the return type.

# What is the difference between function overloading and function template overloading? Answer: Function overloading creates multiple functions with the same name and argument

types, while function template overloading creates multiple functions with the same name but different argument types.

### Can function templates be overloaded based on the number of arguments?

Answer: Yes, function templates can be overloaded based on the number of arguments.

### What are the advantages of function template overloading?

Answer: Function template overloading improves code flexibility and reusability by creating a single function that can be used with different data types.

### Can function templates be overloaded based on the constness of the arguments?

Answer: Yes, function templates can be overloaded based on the constness of the arguments.

### How many function templates can be defined for a given set of argument types?

Answer: Multiple function templates can be defined for a given set of argument types.

### Can function templates be overloaded based on the type of argument?

Answer: Yes, function templates can be overloaded based on the type of argument.