

32 Lecture - CS304

Important Mcqs

1. **What is the purpose of generic programming?**

- a) To improve code readability
- b) To increase code efficiency
- c) To write reusable code
- d) To decrease code maintainability

Answer: c) To write reusable code

Which programming paradigm is most commonly associated with generic programming?

- a) Object-oriented programming
- b) Procedural programming
- c) Functional programming
- d) Event-driven programming

Answer: a) Object-oriented programming

In C++, what is the primary mechanism for achieving generic programming?

- a) Templates
- b) Polymorphism
- c) Inheritance
- d) Encapsulation

Answer: a) Templates

What is the advantage of using templates in C++?

- a) Templates reduce code complexity and improve code readability
- b) Templates allow for more efficient code execution
- c) Templates enable code to be reused with different data types
- d) Templates make it easier to write object-oriented code

Answer: c) Templates enable code to be reused with different data types

In Java, what is the primary mechanism for achieving generic programming?

- a) Templates
- b) Polymorphism
- c) Inheritance
- d) Generics

Answer: d) Generics

What is the difference between templates in C++ and generics in Java?

- a) Templates are more efficient than generics
- b) Templates are a more powerful mechanism for achieving generic programming than generics

- c) Templates are more difficult to use than generics
- d) Templates require explicit type parameterization, while generics do not

Answer: d) Templates require explicit type parameterization, while generics do not

Which of the following is an example of a generic algorithm?

- a) Bubble sort
- b) Quick sort
- c) Binary search
- d) All of the above

Answer: d) All of the above

Which of the following is an advantage of generic algorithms?

- a) Generic algorithms are more efficient than non-generic algorithms
- b) Generic algorithms can be used with any data type
- c) Generic algorithms can only be used with primitive data types
- d) Generic algorithms are easier to debug than non-generic algorithms

Answer: b) Generic algorithms can be used with any data type

Which of the following is a disadvantage of using generics in Java?

- a) Generics can lead to code bloat
- b) Generics can be slower than non-generic code
- c) Generics can make code harder to read
- d) Generics can lead to type erasure

Answer: d) Generics can lead to type erasure

Which of the following is an example of a generic class in C++?

- a) `std::vector`
- b) `std::map`
- c) `std::pair`
- d) All of the above

Answer: d) All of the above