

41 Lecture - CS304

Important Mcqs

1. **What is the purpose of the Standard Template Library (STL) in C++?**
- a) To provide a library of generic algorithms, data structures, and iterators
 - b) To provide a library of graphics functions
 - c) To provide a library of mathematical functions
 - d) To provide a library of input/output functions

Answer: a

Which of the following is a container class in STL?

- a) Vector
- b) Set
- c) List
- d) All of the above

Answer: d

Which of the following is not a type of iterator in STL?

- a) Forward iterator
- b) Reverse iterator
- c) Bidirectional iterator
- d) Parallel iterator

Answer: d

What is the complexity of finding an element in a set in STL?

- a) $O(1)$
- b) $O(\log n)$
- c) $O(n)$
- d) $O(n^2)$

Answer: b

Which algorithm in STL is used to sort a range of elements in ascending order?

- a) sort
- b) reverse
- c) merge
- d) unique

Answer: a

Which container class in STL stores unique elements in sorted order?

- a) Vector
- b) Map
- c) Set
- d) Queue

Answer: c

What is the difference between a stack and a queue in STL?

- a) A stack is a LIFO structure, while a queue is a FIFO structure.

- b) A stack is a FIFO structure, while a queue is a LIFO structure.
- c) Both are LIFO structures.
- d) Both are FIFO structures.

Answer: a

Which algorithm in STL is used to copy a range of elements from one container to another?

- a) find
- b) copy
- c) sort
- d) replace

Answer: b

Which of the following is not a header file in STL?

- a) <vector>
- b) <set>
- c) <list>
- d) <iostream>

Answer: d

Which container class in STL is used to implement a priority queue?

- a) Map
- b) Queue
- c) Stack
- d) Heap

Answer: d