

30 Lecture - CS201

Important Mcqs

1. **What is a reference data type in C++?**

- a) It is a variable that stores the memory address of another variable
- b) It is a variable that refers to another variable by name
- c) It is a variable that can be assigned a null value
- d) It is a variable that cannot be passed to a function

Answer: b

2. **What is the difference between a pointer and a reference in C++?**

- a) Pointers can be reassigned to point to different variables, while references cannot.
- b) References can be null, while pointers cannot.
- c) Pointers are used to pass variables by reference, while references are used to pass variables by value.
- d) There is no difference between a pointer and a reference in C++.

Answer: a

3. **Can a reference be declared without being initialized?**

- a) Yes, a reference can be declared without being initialized.
- b) No, a reference must be initialized when it is declared.
- c) It depends on the data type of the reference.
- d) It depends on the scope of the reference.

Answer: b

4. **What is the benefit of passing parameters by reference in a function?**

- a) It saves memory by not creating a copy of the variable.
- b) It allows the function to modify the original variable.
- c) It makes the code more readable.
- d) It makes the code faster.

Answer: b

5. **What happens if a reference is assigned to a new variable?**

- a) The original variable is deleted.
- b) The new variable becomes an alias for the original variable.
- c) A new copy of the original variable is created.
- d) The program crashes.

Answer: b

6. **Can a reference be used as a return type for a function?**

- a) Yes, a reference can be used as a return type for a function.

- b) No, a reference cannot be used as a return type for a function.
- c) It depends on the data type of the reference.
- d) It depends on the scope of the reference.

Answer: a

7. What is the syntax for declaring a reference variable in C++?

- a) `int& x;`
- b) `int* x;`
- c) `int x&;`
- d) `int& x = y;`

Answer: d

8. Can a reference refer to a const variable?

- a) Yes, a reference can refer to a const variable.
- b) No, a reference cannot refer to a const variable.
- c) It depends on the data type of the reference.
- d) It depends on the scope of the reference.

Answer: a

9. What is the difference between a const reference and a non-const reference?

- a) A const reference cannot be modified, while a non-const reference can.
- b) A non-const reference cannot be modified, while a const reference can.
- c) There is no difference between a const reference and a non-const reference.
- d) A const reference cannot refer to a non-const variable.

Answer: a

10. Can a reference refer to a temporary object?

- a) Yes, a reference can refer to a temporary object.
- b) No, a reference cannot refer to a temporary object.
- c) It depends on the data type of the reference.
- d) It depends on the scope of the reference.

Answer: a