

14 Lecture - CS201

Important Mcqs

1. **What is a pointer in C++?**

- a) A keyword used to declare variables
- b) A variable that stores the memory address of another variable
- c) A data type used to store text
- d) A type of loop used in programming

Answer: b) A variable that stores the memory address of another variable

2. **Which operator is used to declare a pointer variable in C++?**

- a) *
- b) &
- c) \$
- d) #

Answer: a) *

3. **Which of the following statements is true about null pointers in C++?**

- a) They point to the address 0x0000.
- b) They point to the address 0xFFFF.
- c) They are not allowed in C++.
- d) They can be used to indicate that a pointer does not point to anything.

Answer: d) They can be used to indicate that a pointer does not point to anything.

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

- a) A pointer is a variable that holds a memory address, while a reference is an alias for another variable.
- b) A reference is a variable that holds a memory address, while a pointer is an alias for another variable.
- c) There is no difference between a pointer and a reference.
- d) A pointer is used for dynamic memory allocation, while a reference is used for static memory allocation.

Answer: a) A pointer is a variable that holds a memory address, while a reference is an alias for another variable.

5. **What is the use of the `new` operator in C++?**

- a) To declare a new variable
- b) To delete a variable
- c) To allocate memory for a new object
- d) To free memory for an existing object

Answer: c) To allocate memory for a new object

6. **What is the use of the `delete` operator in C++?**

- a) To declare a new variable
- b) To delete a variable
- c) To allocate memory for a new object
- d) To free memory for an existing object

Answer: d) To free memory for an existing object

7. **What is a dangling pointer?**

- a) A pointer that points to an invalid memory address
- b) A pointer that points to a valid memory address
- c) A pointer that points to a null value
- d) A pointer that points to an uninitialized value

Answer: a) A pointer that points to an invalid memory address

8. **Which of the following is the correct syntax to declare a pointer to a constant integer in C++?**

- a) `const int *ptr;`
- b) `int const *ptr;`
- c) `const int * const ptr;`
- d) `int * const ptr;`

Answer: b) `int const *ptr;`

9. **What is a void pointer in C++?**

- a) A pointer that points to a function
- b) A pointer that points to a structure
- c) A pointer that has no data type associated with it
- d) A pointer that points to an integer value

Answer: c) A pointer that has no data type associated with it

10. **What is the use of the `reinterpret_cast` operator in C++?**

- a) To cast a pointer from one data type to another
- b) To cast a reference from one data type to another
- c) To cast a variable from one data type to another
- d) To cast a pointer from one function to another

Answer: a) To cast a pointer from one data type to another