# 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