

MCQ for Day 3

1. **Which of the following is not a fundamental data type in C++?**
 - a) int
 - b) float
 - c) bool
 - d) string
2. **Which of the following correctly describes the purpose of the #include directive?**
 - a) It includes the content of a specified file into the program.
 - b) It defines a macro.
 - c) It is used to declare a function.
 - d) It ends a function definition.
3. **What is the purpose of a constructor in a class?**
 - a) To initialize objects of the class.
 - b) To create a copy of an object.
 - c) To destroy objects of the class.
 - d) To allocate memory dynamically.
4. **Which of the following statements is true about destructors in C++?**
 - a) A class can have multiple destructors.
 - b) Destructors can take parameters.
 - c) Destructors are called automatically when an object goes out of scope.
 - d) Destructors must be called explicitly.
5. **Which of the following is the correct syntax to declare a pointer to an integer?**
 - a) int* ptr;
 - b) int &ptr;
 - c) int ptr;
 - d) int* &ptr;
6. **What is the output of the expression sizeof(char) in C++?**
 - a) 1
 - b) 2
 - c) 4
 - d) 8
7. **Which of the following is the correct way to declare a constant variable in C++?**
 - a) const int x = 10;
 - b) int const x = 10;
 - c) Both a and b
 - d) None of the above
8. **What is the default access specifier for members of a class in C++?**
 - a) public

- b) private
 - c) protected
 - d) internal
9. Which of the following is a correct way to allocate memory dynamically for an array of 10 integers?
- a) `int* arr = new int[10];`
 - b) `int arr = new int[10];`
 - c) `int* arr = malloc(10 * sizeof(int));`
 - d) `int arr[10];`
10. What will be the output of the following code ?

```
int x = 10;
```

```
int y = x++;
```

```
cout << y;
```

- a) 9
 - b) 10
 - c) 11
 - d) Undefined behavior
11. Which of the following is not a feature of object-oriented programming in C++?
- a) Encapsulation
 - b) Inheritance
 - c) Polymorphism
 - d) Recursion
12. In C++, which of the following operators cannot be overloaded?
- a) +
 - b) ?
 - c) []
 - d) ()
13. Which keyword is used to handle exceptions in C++?
- a) try
 - b) except
 - c) catch
 - d) finally
14. Which of the following containers is part of the C++ Standard Template Library (STL)?
- a) list
 - b) array
 - c) hash_map
 - d) set

15. **What is the purpose of the `virtual` keyword in C++?**
- a) To define a virtual function.
 - b) To declare an abstract class.
 - c) To allocate memory on the heap.
 - d) To call the base class constructor.
16. **Which of the following is a valid way to declare an inline function?**
- a) `inline int func() { return 0; }`
 - b) `int inline func() { return 0; }`
 - c) Both a and b
 - d) None of the above
17. **Which of the following is not a type of inheritance in C++?**
- a) Single inheritance
 - b) Multiple inheritance
 - c) Multilevel inheritance
 - d) Redundant inheritance
18. **What does the `this` pointer point to in a class member function?**
- a) The class itself
 - b) The member function
 - c) The current object
 - d) The base class object
19. **Which of the following statements about namespaces in C++ is true?**
- a) Namespaces provide a way to avoid name conflicts.
 - b) Namespaces are used to define classes.
 - c) Namespaces must be declared inside `main()`.
 - d) Namespaces cannot be nested.
20. **What does the keyword `friend` indicate in C++?**
- a) It grants a function access to the private members of a class.
 - b) It creates a new class.
 - c) It defines an inline function.
 - d) It prevents inheritance.

Solution of Above MCQ

Which of the following is not a fundamental data type in C++?

- d) string

3. Which of the following correctly describes the purpose of the **#include** directive?

- a) It includes the content of a specified file into the program.

4. What is the purpose of a constructor in a class?

- a) To initialize objects of the class.

5. Which of the following statements is true about destructors in C++?

- c) Destructors are called automatically when an object goes out of scope.

6. Which of the following is the correct syntax to declare a pointer to an integer?

- a) *int ptr;**

7. What is the output of the expression **sizeof(char)** in C++?

- a) 1

8. Which of the following is the correct way to declare a constant variable in C++?

- c) Both a and b

9. What is the default access specifier for members of a class in C++?

- b) private

10. Which of the following is a correct way to allocate memory dynamically for an array of 10 integers?

- a) *int arr = new int[10];**

What will be the output of the following code snippet?

cpp

Copy code

```
int x = 10;
```

```
int y = x++;
```

```
cout << y;
```

11. b) 10

Which of the following is not a feature of object-oriented programming in C++?

- d) Recursion

In C++, which of the following operators cannot be overloaded?

12. b) ?

Which keyword is used to handle exceptions in C++?

- a) try

Which of the following containers is part of the C++ Standard Template Library (STL)?

13. d) set

What is the purpose of the **virtual** keyword in C++?

- a) To define a virtual function.

Which of the following is a valid way to declare an inline function?

14. a) `inline int func() { return 0; }`

Which of the following is not a type of inheritance in C++?

- d) Redundant inheritance

What does the **this** pointer point to in a class member function?

15. c) The current object

Which of the following statements about namespaces in C++ is true?

- a) Namespaces provide a way to avoid name conflicts.

What does the keyword **friend** indicate in C++?

16. a) It grants a function access to the private members of a class.



Nepal Institute of
Engineering