

IMSc (CA&IT) Sem.-3 Examination
Object Oriented Programming with C++
December-2025

Time : 2.30 Hours]

[Max.Marks : 70

Q.1 Answer the Following Questions. (Any two) (14)

1. What are tokens in c++? Explain Keewords, identifiers, constants and operators with simple examples.
2. What is static data members and static member functions? How do we use static data member and member function in c++?
3. What is a function? Explain Call by value and call by reference with example.

Q.2 Answer the Following Questions. (14)

- a. What is a constructor? Explain default constructor and parameterized constructor with example.
- b. What is friend function? Explain how friend functions are used for operator overloading with example.

OR

- a. What is a destructor? Explain the characteristics of destructors. Write a program to show when destructor is executed.
- b. What is type conversion? Explain the basic to class and class to basic type conversion with example.

Q.3 Answer the Following Questions. (Any two) (14)

1. What is multilevel Inheritance? Explain Multilevel inheritance with example.
2. What is virtual function? Explain How runtime polymorphism is achieved using virtual functions.
3. What is Hybrid Inheritance? How to hybrid Inheritance use in c++ with example.

Q.4 Answer the Following Questions. (14)

- a. What are file stream classes in c++? Explain ifstream, ofstream, and fstream with example.
- b. what are command line arguments? Explain the meaning of argc and argv with examples.

12944-2

OR

- a. Explain write() and read() functions with example for sequential input and output operations.
- b. What is file mode? Describe the various file mode options available.

Q.5 Answer the following Questions. (Any two)

(14)

1. What is exception handling operations? Explain exception handling with example.
2. What is template? Write syntax of function templates with multiple Parameter and write Example.
3. Explain overloading of template function with example.

—X—