## **Subject: C++ Programming**

Total Marks: 80

Instructions: Answer all 16 questions. Each question carries 5 marks.

- 1. Explain the features of Object-Oriented Programming (OOP).
- 2. Differentiate between C and C++.
- 3. What is a class and object in C++? Explain with an example.
- 4. Write a program to create a class with two variables and display them.
- 5. Explain access specifiers in C++: public, private, and protected.
- 6. What is a constructor? Explain types of constructors.
- 7. Explain destructor with an example.
- 8. Write a program to demonstrate function overloading.
- 9. What is operator overloading? Give an example.
- 10. Explain inheritance. Describe types of inheritance in C++.
- 11. Write a program to implement single inheritance.
- 12. What is polymorphism? Explain runtime and compile-time polymorphism.
- 13. What is a virtual function? Explain with an example.
- 14. Describe the use of templates in C++.
- 15. Explain exception handling with try, catch, and throw.
- 16. Write a program to handle divide-by-zero exception using try-catch block.