

**Q.P. Code :02553**

**[Time: Three Hours]**

**[Marks:80]**

Please check whether you have got the right question paper.

- N.B: 1. **Question.No.1** is Compulsory.  
2. Attempt any **three** from reaming **five** questions.

- Q.1 a)** Explain ambiguity in multiple inheritance with suitable program. **10**
- b) Write a C++ program to create a class with two member variables and member functions. Add constructors to demonstrate call by value and call by reference. Create an array of objects and call member functions on each object. **10**
- Q.2 a)** Explain use of try, catch and throw keyword with a suitable example. **10**
- b) What are rules for use of static? Write a program to demonstrate use of static keyword. **10**
- Q.3 a)** What is used of friend function? With suitable program demonstrate friend as a bridge to access private variables of two classes. **10**
- b) Write a program to overload >> and << operator. **10**
- Q.4 a)** Explain use of function template and class template with suitable program. **10**
- b) What are pitfalls of operator overloading. **10**
- Q.5 a)** Write a steps to demonstrate the database connectivity to mysql database. **10**
- b) What is polymorphism? Write a program to demonstrate how it is achieved at run time. **10**
- Q.6 a)** Differentiate between **10**
- 1) Constructors and destructor
  - 2) New and delete
- b) Write a short note on **10**
- 1) STL
  - 2) Namespaces.