

OCTOBER 2013

**P/ID 17459/
RCJ/PCAH**

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) What is OOP? What are the three traits to support the principles of OOP?

Or

- (b) Explain friend functions and friend classes.

2. (a) Write notes on pointers to class members.

Or

- (b) Explain function overloading with example.

3. (a) What do you mean by polymorphism? Give an example.

Or

- (b) Explain operator overloading using friend function.

4. (a) What is generic functions and how to apply a generic function?

Or

- (b) Write about the fundamentals of exception handling.

5. (a) What are the manipulators used to format I/O?

Or

- (b) How to create your own manipulator function?

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

6. Explain in detail about the constructors and destructors in C++ with example.
7. Explain in detail about the friend function with a sample program.

8. Explain in detail about the use of pointers to object. Write a note on 'this' pointer.
 9. Explain in detail about the virtual and the pure virtual function with example.
 10. Explain inheritance and types of inheritance with a sample program.
 11. Explain how run-time polymorphism is achieved with an example program.
 12. Explain how class templates are created and used.
 13. Explain in detail about Standard Template Library (STL).
-