

MAY 2013

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

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Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) What are the elements of OOP? How do this make OOPS approach best suited by address real world problems?

Or

- (b) State the need for scope resolution operator.

2. (a) What is virtual function? What are pure virtual functions? Discuss with the help of examples.

Or

- (b) Explain operator overloading with example.

3. (a) What are ambiguity in function overloading?

Or

- (b) Write a C++ program to calculate area of Rectangle, Circle and Triangle using function overloading.

4. (a) Explain the use of Terminate() functions.

Or

- (b) Explain class templates.

5. (a) Explain the following :

- (i) File Input/Output
- (ii) Name space.

Or

- (b) Explain the standard template library.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Explain in detail the following principles of object oriented programming.
- (a) Data encapsulation and Data hiding
  - (b) Polymorphism.
7. What are the different forms of inheritance? Explain with examples.
8. Develop C++ programs that make use of pointers to functions.
9. Briefly explain term exception handling and associate C++ function.

10. Explain the following :
    - (a) Unexpected()
    - (b) Uncaught()
  11. Explain the derived class exception in detail.
  12. Give an overview of various C++ Input and Output streams.
  13. Discuss about Array based I/O and File I/O with example.
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