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**Question Paper Code : 51351**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Fifth Semester

Electrical and Electronics Engineering

CS 2311/CS 59/10133 EE 604/10133 CS 304 — OBJECT ORIENTED  
PROGRAMMING

(Common to Electronics and Instrumentation Engineering and Instrumentation and  
Control Engineering)

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define encapsulation.
2. What is abstract class?
3. Write about operator overloading?
4. What is Destructor?
5. What are the manipulators available in C++?
6. What are the merits of using classes?
7. Define bytecode in java.
8. What is API package?
9. What is the use of final keyword?
10. Write the methods of threads?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the following concepts of Object Oriented Programming in detail with an example. (16)

(i) Data abstraction

(ii) Inheritance.

Or

(b) (i) What are the needs for object oriented paradigm. (8)

(ii) Explain the constructors and destructors in detail with example program. (8)

12. (a) (i) Write the list of rules for overloading operators with one example. (8)

(ii) Describe the templates and its types. (8)

Or

(b) Explain run time polymorphism with suitable example. (16)

13. (a) (i) Describe the various file mode operations available in C++. (8)

(ii) Explain the components of standard template library in detail. (8)

Or

(b) Describe about exception handling with example program. (16)

14. (a) Write short notes on the following in Java.

(i) String (8)

(ii) Java virtual machines. (8)

Or

(b) Explain the arrays and its types in detail with example program. (16)

15. (a) Explain the interfaces in detail with suitable example. (16)

Or

(b) (i) Explain the life cycle of a thread in detail with example program. (8)

(ii) Explain the concept of streams and its byte stream classes in detail. (8)