

Roll Number:

**ANNA UNIVERSITY – UNIVERSITY DEPARTMENT  
BE DEGREE EXAMINATION, NOV/DEC 2011  
ELECTRICAL AND ELECTRONICS ENGINEERING BRANCH  
SECOND SEMESTER**

**EE 9152 OBJECT ORIENTED PROGRAMMING C++**

Duration: Three Hours

Answer All Questions  
**Part A (10 x 2 =20 Marks)**

Max Marks: 100

1. What is the difference between a procedure and object oriented programming?
2. What is associativity?
3. Give an example in C++ for nested classes.
4. What is the difference between static and dynamic binding?
5. State different methods by which an object can be initialized.
6. Define Virtual function
7. What is the difference between composition and inheritance?
8. State the rules for the order of constructor execution in inheritance.
9. What is STL?
10. What are exceptions?

**PART B ( 5 x 16 = 80 Marks)**

11. i) State the merits and demerits of object oriented programming methodology (8)  
ii) Enlist the differences between C & C++. (8)
- 12.a. Explain in detail with examples the application of constructors and destructors (OR)
- 12.b. Implement a complete class to represent a bank account. Include the following members: Data Members (Name of the depositor, Account Number, Type of account, Balance amount in the account) and Member functions (To assign initial values, To deposit an amount, To withdraw an amount after checking the balance, To display name and balance)
- 13.a. With suitable examples, explain virtual functions and the importance of virtual destructors (OR)
- 13.b. Write short notes on the following with examples (8)
  - I. Access specifiers (8)
  - II. Dynamic Memory Allocation (8)
- 14.a. Demonstrate operator overloading with suitable examples (OR)
- 14.b. Explain class and function templates in detail with illustrative examples.
- 15.a. Explain run time type identification with an example (OR)
- 15.b. Explain in detail the different components of STL

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