# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Max. Marks: 100

## B.E. [EEE] II Semester - Full-Time :: Nov. / Dec. 2012 EE 9152 - OBJECT ORIENTED PROGRAMMING

ANNA UNIVERSITY :: CHENNAI - 600 025

#### Time: 3 Hrs.

Answer ALL Questions

### Part - A $(10 \times 2 = 20)$

- 1. Differentiate between Object-oriented and Object-based approach?
- 2. List any two merits and two demerits of object oriented methodology.
- 3. Differentiate between pre and post increment/decrement operators.
- 4. Differentiate between while and do...while loops.
- 5. List the properties of a static member functions.
- 6. What do you mean by default constructor?
- 7. What is the effect of inheritance on the visibility of members?
- 8. Give the general format for function templates.
- 9. How generic programming is implemented in C++?
- 10. When do we use multiple catch handlers?

#### Part - B $(5 \times 16 = 80)$

11.	í)	Wh	nat do you mean by polymorphism?	[4]
	ii)	Exj	plain multiple and multilevel inheritance with examples.	[12]
12.	a]	i) ii)	Write a note on object-oriented methodology. Explain the repetition control structures used in C++ with examples. Or	{8] [8]
	b]	i) ii)	Discuss the special operators available in C++. List the hierarchy of operators and their associativity.	[10] [6]
13.	a]	i) ii)	What do you mean by constructors and destructors? State and explain the different methods of defining member functions. Or	[4] [12]
	b]	i) ii)	What do you mean by dynamic initialization of objects and how it is achieved? Explain the concept of dynamic constructors with an example.	[8] [8]
14.	a]	i) ii)	State the rules for operator overloading. Define a class for strings. Overload + and == operators for adding and comparisons.	[6] ting two [10]
	b]	i) ii)	What are the possible type conversions in C++? How they are achieved? Write short notes on Function Templates and Class Templates.	[6] [10]
15.	a]	i)	What do you mean exception handling? Llist the methods available in C-style ex handling and explain how they are used with an example.	ception [16]
	b]	i)	List and explain the purpose of different statements available in $C++$ for handling time errors. Explain how they are used to handle exceptions with an example.	ng run- [16]