

SUBJECT CODE : P8MBA4ED6

ELECTIVE COURSE – VI : OBJECT ORIENTED PROGRAMMING & C ++

UNIT I INTRODUCTION

Traditional Programming approaches – Straight – Run Programming & structured Programming techniques – Limitations of Traditional Approaches – Object Oriented Approach – Objects – Classes – Data encapsulation – Data abstraction – Inheritance – Code Reusability – Polymorphism – Object Oriented Languages.

UNIT II OBJECT ORIENTED ANALYSIS AND DATA MODELING

Object Oriented Analysis & Data Modeling – Object Oriented Concepts, Object Oriented Analysis Modeling – Object Oriented design concepts, object oriented design methods, class & object definition, refining operations, program components & interfaces.

UNIT III DESIGNING OF OO SYSTEMS

Notation for OOD, Implementation detailed design, An Alternative Object Oriented Design strategy, integrating OOD with SA/SD.

UNIT IV C++ BASICS

C++ Programming basics-classes & objects, constructor & destruction, Overloaded constructors, Access specifiers, static class data, Inheritance, Base Class & Derived class constructors, overriding member functions, class hierarchies, abstract base class, public & Private inheritance, levels of inheritance, multiple inheritance.

UNIT V ADVANCED CONCEPTS

Polymorphism, operator overloading, Virtual functions, Dynamic or Late binding, abstract classes, virtual base classes, friend functions static functions, Templates classes, Case Studies & Programming development in C++ demonstration & presentation.

Text Books:

1. Lafore, R, “Object Oriented Programming in C++, Galgotia Publications.
2. Champeaux, D.D., & Douglas Lea “Object Oriented System Development”, Addison – Waisley.