

Veer Narmad South Gujarat University, Surat
Syllabus for S Y B Sc (Electronics) CAN (IDS) Course w.e.f. June 2012
Object Oriented Programming

Unit – 1

Introduction, Need for Object Oriented Programming Basic of OOP, Fundamentals and Qualifiers to Data types, Reference Data types, Variables, Constants, Operator and expressions, Statements: labeled statement, expression statement, compound statement, control statement, Jump statement, declaration statement, Try-Throw-Catch statement.

Unit – 2

Array, Addresses and Pointers, Pointers and Functions, Functions: declaration, definition and call; Inline functions; main function argument; reference variables; function overloading; default argument; parameter passing; recursion, scope of variables; return-by value and return-by-reference; pointers to functions,

Unit – 3

Data abstraction through Classes and User-defined Data type: C-structure; typedef; member class; controlling access to member class, constructor and destructor; copy constructor; dynamic memory management: operators new and delete; malloc and free; static member, scope of class name and variables, operator overloading and class relationship, polymorphism, inheritance.

Recommended Books

- 1) Debasish Jana, C++ and Object-Oriented Programming Paradigm, PHI, New Delhi
- 2) E Balagurusamy, Object-Oriented Programming with C++, TMH, New Delhi
- 3) Herbert Schildt, The complete Reference C++, TMH, New Delhi