

ELECTIVE COURSE III – BASICS OF COMPUTER PROGRAMMING

Unit I

Introduction to Computers : Introduction – Characteristics of computers – Generation of computers – Classification of computers – The computer system – Application of Computers.

Computer Architecture : Introduction – Central Processing Unit – Memory.

Unit II

Computer Program : Introduction – Developing a program – Algorithm – Flow Chart.
Computer Languages : Introduction – evolution of programming languages – Classification of programming languages.

Computer Software : Introduction – Software definition – Relationship between software and hardware - Software categories – System Software – Application Software.

Unit III

Introduction to C – overview of computers and interpreters – structure of a C program – C character set – C keywords – Constants – Variables – Data types – Type conversion – Operators and Expressions.

Unit IV

Input and Output in C – Decision statements: IF, ELSE-IF, BREAK, CONTINUE, GOTO and SWITCH. Loop Control statements. FOR, WHILE, DO-WHILE.

Unit V

Arrays: Array Initialization and Definition – One Dimensional Array – Two Dimensional Array.

Functions: Definition and Declaration – return statement – Types of functions.

Text Books:

Introduction to Computer Science
ITL Education Solutions Limited – First Indian print 2004.

Programming with ANSI and TURBO C
Ashok.N.Kamthane. Third Indian print, 2003.

Reference Book:

Programming in C
Balagurusamy. E-Tata McGraw Hill.