

CA521 PROGRAMMING METHODOLOGY

Prerequisite: Nil

Aim: To inculcate problem-solving skills and to introduce basics of programming through C language to entry-level computer science students.

Course Content:

Problem Analysis, flow Charts, decision tables. Pseudo codes and Algorithms, High level language and Programmer's Model of Computer System.

Algorithmic Programming Language: Representation of integers, reals, characters, constants and variables, arithmetic expressions and their evaluation using rules of hierarchy. Assignment statements, Logical constants variables and expression Control structures - sequencing alteration, iteration. Arrays, Manipulating vectors and matrices. Subroutines overhead cost, interpretation of the variances. Compiling, debugging and testing in integrated development environment.

Books:

1. Kernighan, BW. and Richie, DM.: The C programming language, PHI, 2nd edition, 1999.
2. Michael Schneider; Introduction to problem solving and programming through pascal.
3. Drmey R.G.: How to solve it by Computer.
4. Gries D.: Science of programming.
5. Niklaus Wirth.: Data Structures + Algorithms = Programs.