

ELECTIVE COURSE IV – PROGRAMMING IN C LANGUAGE

(THEORY & PRACTICALS)

Credit Allotted: 4

Max. Marks: 75

**Internal Assessment Theory – 15 Marks;
Univ. Exam. Theory – 45 marks**

**Practical – 10 marks
Practical - 30 marks**

THEORY

2 hours

Unit I

C Language – Features – Compilers – Character Sets – Identifiers – Reserved Words – Concept of Data Types – Qualifiers – Specifiers – constant – Escape sequences – C – Program structure - Type of Operators – Arithmetic – Relational – Logical – Bitwise – Assignment – Type conversion – Operator precedence and associativity.

Unit II

Simple Input / Output Facilities – Header Files – Functions – Formatted I/O functions – Scanf() – Printf() – Writing C Program.

Unit III

Control constructs – If – else – if else if – do while – while – nested loops – break statement – continue, switch case – storage classes – Arrays – Functions – Pointers – Structure – Union – Files.

Practical Programs

Unit IV

Program to print pay bills; Result processing – Electricity bill preparation; Telephone bill preparation – Bank Transactions; Income Tax Calculations – Admission list preparation; Driving License Application – Medical Diagnosis.

Unit V

Calculation of simple interest and compound interest – Reverse a float; string; If, Else if, Do while, While loops – Nested loops; Property Tax Calculation – Profit and Loss Account; Balance Sheet.

Books Recommended :

1. Programming in C – Balagurusamy.
2. C for All – S Thamarai Selvi and R Murugesan.