

Introduction to Computers & Programming in C (CS – 1001)

Course Code	CS-1001	Credits-4	L – 3, T-1, P-0
Name of the Course	Introduction To Computers & Programming In C		
Lectures to be Delivered	52 (1 Hr Each) (L= 39, T = 13 for each semester)		
Semester End Examination	Max. Marks: 100	Min. Pass Marks: 40	Maximum Time: 3hrs
Continuous Assessment (based on sessional tests (2) 50%, Tutorials/Assignments 30%, Quiz/Seminar 10%, Attendance 10%)			Max. Marks: 50

Instructions

1. **For Paper Setters:** The question paper will consist of five sections A, B, C, D, and E. Section E will be Compulsory, it will consist of a single question with 10-20 subparts of short answer type, which will cover the entire syllabus and will carry 40% of the total marks of the semester end examination for the course. Section A, B, C and D will have two questions from the respective sections of the syllabus and each section will carry 15% of the total marks of the semester end examination for the course.

2. **For Candidates:** Candidates are required to attempt five questions in all selecting one question from each of the sections A, B, C and D of the question paper and all the subparts of the questions in section E. Use of non-programmable calculators is allowed.

Section A

Fundamental Computer Concepts; Operating system fundamentals, disk basics, VDU Basics, Keyboard basics. Introduction to compiler, interpreter, assembler, linker and loader and their inter relationship. Introduction to Basics of Information Technology.

Section B

Problem Solving with Computers : Algorithms, pseudocodes and Flowcharts, Debugging, testing, and documentation, structure-programming concepts, top down and bottom – up design approaches. Data Types, Constants, variables, arithmetic and logical expressions, data inputs and output, assignments statements, conditional statements.

Section C

Iteration, arrays processing, User-defined data types, functions, recursion, parameter passing by reference and by value.

Section D

Structure, Multiple structure, Arrays of structure, Unions,

Files: reading, writing text and binary files, pointers, Character pointers, pointers to arrays, arrays of pointers to structures.

(The programming language C is to be taught along with the course in detail)

Books:

1. Kanetkar, "let Us C", BPB Publications
2. Richie and Kerningham, "C Programming"
3. V Rajaraman "Fundamentals of computers"
4. D. Dromey, "How to solve it by computers" (Prentics- Hall)
5. E. Balaguruswamy, "Programming in C", Tata M.Graw hill