Aggarwal College Ballabgarh

A Post Graduate Co-educational College
(Affiliated to M. D. University, Rohtak)
NAAC Accredited 'A' Grade (CGPA: 3.40)

Certificate Course in Logic Building and Effective Problem Solving

Objective
The learner will be able to learn Logic Building and Effective Problem Solving

Benefit
The Learner will be able to create flowcharts and write pseudo codes.

Duration
70 hours

Paper	Title of the paper
Paper-1	Introduction of programming component
Paper-2	Data Management System

Course contents & Syllabus

Fundamental of Programming Part 1 – Paper 1

- Identify the input and output requirements of a computer problem
  - What is input?
  - What is output?
  - Diagrammatic representation of input and output.
- Explain programs and programming languages
  - What is a program?
  - What is a programming language?
  - Different types of languages.
- Identify the various tools for problem solving
  - Input box
  - Output box
  - Start
  - Terminator.
  - Decision Box.
  - Flow of data.
- Solve problems using flowcharts
  - Represent log of the different problems using Flowcharts.
- Represent decisions and repetitive processes in a flowchart
  - Iterative Data.
  - Loops.

Fundamental of Programming Part 2 – Paper 2
- Solve problems using a pseudo code

- - What is a Pseudo code?
  - Representation of logic using pseudo codes.
- Use variables and constants
  - What is a variable and constants?
  - What is memory allocation?
- Identify data types
  - Different Data Types
  - Integer, character, float, double , string.
- Identify operators
  - Arithmetic operators.
  - Logical operators.
  - Boolean operators.
- Perform the conditional execution
  - If else conditions.
  - When then

Certification

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