# 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 Computer Overview and Programming Structure and Methodology

## **Objective**

This program will enable the students to get overview of the computers and program structure and methodology.

#### **Benefit**

Core concepts of program structure and methodology which enables student to get basics of programming.

#### **Duration**

59 hours

#### **Examination**

Paper	Title of the paper
Paper-1	Introduction to computer and Operating System
Paper-2	Understanding Programming and Software Applications

#### **Course contents & Syllabus**

# **Introduction to computer and Operating System – Paper 1**

- Identify various computer systems
  - Mini computers
  - Micro Computers
  - Desktop computers
  - o Laptop
  - o Palmtop
  - Super computers
- Identify components of a PC system
  - o Motherboard
  - Hard disk
  - o LAN card
  - Pen drive
  - o Floppy drive
  - o CD Drive
  - o Printers
  - o Plotters
  - o Keyboard
  - o Monitor
  - Central Processing Unit

- Mouse
- Identify types of files used to organize data
- Work with Windows
  - User Interface
  - Graphical user interface
  - Character user interface
  - o Desktop
  - My computers
  - Folders and files
  - Cut copy and paste.
- Work with Linux
  - o Why Linux.
  - o Properties of operating system.
  - o Commands in Linux.
  - Graphical user interface in Linux.

## **Understanding Programming and Software Applications – Paper 2**

- Use Internet and Social Networking media
  - o How to use
  - o Why to use.
  - Search engines
- Understand the need of Critical Thinking and Problem Solving in programming
  - O What is Critical Thinking?
  - o Why is critical thinking required?
  - o Demonstration of critical thinking through practical.
- Get acquainted with Digital Data
  - O What is digital data and where we use it.
- Use algorithms for designing programs
  - o Logic building.
  - o Create flow charts.
  - Write pseudo codes.
- Identify and apply software testing techniques
  - What is a need to software testing?
  - o Different tools of software testing.
- Work with MS word 13
  - o Create Documents.
  - o Open, Save documents.
  - o Print documents.
  - Cut Copy Paste
  - o Mail merge
  - o Representing Data in Tabular form.
  - o Inserting data from different sources.

#### Certification

Certificate in Computer overview and programming structure and methodology