

# 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 Information Systems and Common Business Processes

### Objective

This program focuses on enterprise resource planning, sales and marketing and managing data using SQL

### Benefit

This program imparts of information system and common Business Processes and Manage data using SQL

### Duration

66 hours

### Examination

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

### Project:

Project using SQL data base

## Course contents & Syllabus

### Introduction of programming component – Paper 1

- Implement iterative processes
  - Loops.
  - While loop.
  - Do while Loop.
- Implement modular programming
  - Functions.
  - Batches.
  - Procedures.
- Work with arrays
  - What is an array?
  - What is the difference between variable and Array.
  - Single dimensional Array
  - Double Dimensional Array.
  - Manipulate arrays using loops
- Understand Organization and their Business Processes
  - What is organization?

- What are different business processes?
- Understand Information Systems
  - What is information Systems?
  - How to implement Information systems
- Identify the need of Enterprise Resource Planning
  - Resource Planning.
  - Enterprise resource planning.
- Manage Sales and Marketing Using Information Systems
  - What is sales and Marketing?
  - Why Sales and Marketing?
  - How to implement Sales and Marketing using Information systems.

## **Data Management System – Paper 2**

- Manage Production Using Information Systems
- Manage Logistics Using Information Systems
- Learn about Human Resource Management Using Information Systems
  - What is Human Resource?
  - What are the different Job roles of Human Resource?
  - How we can manage Human Resources using Information Systems.
- Manage Financial Accounting Using Information Systems
  - Idea of Financial Accounting?
  - Different tools in Information
- Create Financial Statements.
  - Trading Account.
  - Profit and loss Account.
  - Balance sheet.
  - Cash flow statement.
- Manage The Supply Chain Using Information Systems
  - Subsidiary books.
- Learn about Data Models
  - What is a Data Models.
  - Different types of Data Models.
- Create Database Design
  - What is a database?
  - Create database.
  - Manage database.
- Normalize and De-normalize Data
  - What is normalization?
  - Why to normalize data?
  - Different forms of Normal Form.
- Manipulate Data in Tables
  - What is a table?
  - What is tuple?
  - What is a field?
- Implement Indexes, Views, and Full-Text Search
  - What is an Index.
  - Why we need indexing.
  - Different types of Indexes.
  - Full-Text Search.
  - Why Views.
- Implement Stored Procedures and Functions
  - Stored procedures.
  - Stored procedures with input parameters.
  - Stored procedures with Output Parameters.
  - Functions
  - Difference between function and stored procedure.
- Work with Triggers and Transactions

- Triggers.
- Different types of Triggers.
- Insert, update and delete Trigger.
- Monitor and Optimize Performance

## **Certification**

Certificate in Information Systems and Common Business Processes

## **Project**

Project using SQL data base