

Session 2019-20

# Programme and Course Outcome

PGDCA



**Multani Mal Modi College,  
Patiala**

## **Program Outcomes (POs)**

**After the completion of the program the learner will be able to**

**PO-1:** Make use of internet for searching and downloading information on web, sending or receive e-mails.

**PO-2:** Prepare presentation and perform computation on excel sheet.

**PO-3:** Handle windows and Linux operating system for general purpose applications and networking.

**PO-4:** Develop general purpose application based on C/C++ and HTML based languages.

**PO-5:** Perform various office activities on computer system such as installation of software, handling of printer and scanner, internet connection along with troubleshooting of system.

## Course Outcomes (COs)

### PGDCA

#### Semester-1st

Code	Course
PGDCA-101	Fundamentals of Information Technology
PGDCA-102	Operating Systems
PGDCA- 103	Problem Solving using C
PGDCA-104	Software Lab – I (Office Automation and Productivity Tools)
PGDCA-105	Software Lab – II (Programming Fundamentals through C Language)

#### Semester-2<sup>nd</sup>

Code	Course
PGDCA-201	Database Management System
PGDCA-202	Introduction to Computer Network, Internet and E-Commerce
PGDCA-203	Object-oriented Programming using C++
PGDCA-204	Software Lab – III (Web Designing, HTML and RDBMS)
PGDCA-205	Software Lab – IV (C++ Programming)

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### PGDCA-101 Fundamentals of Information Technology & Software Lab – I (Office Automation and Productivity Tools)

**Upon the completion of the course the learner will be able to**

**PO-1:** Familiarization with the types of computer, peripheral devices, memory

management, multimedia and number system.

**PO-2:** Learn about working of various input and output devices.

**PO-3:** Learnt about binary number representation along with its operations.

**PO-4:** Understand theoretical framework of internet and associated application of the internet.

**PO-5:** Acquire the knowledge about the binary number representation along with its operations.

**PO-6:** Understand of the role of computers in business, education and society.

### **PGDCA-102 Operating Systems**

**After the completion of the course the learner will be able to**

**CO-1:** Understand various terminologies related to Operating system.

**CO-2:** Learn the basic structure and organization of the file system.

**CO-3:** Acquire knowledge about various process management and CPU scheduling.

**CO-4:** Understand various features and application of windows operating system.

**CO-5:** Learn about fundamentals of Linux operating system.

**CO-6:** Acquire knowledge about various Linux commands.

### **PGDCA-103 Problem Solving using C & Software Lab – II (Programming Fundamentals through C Language)**

**Upon the completion of the course the learner will be able to**

**CO-1:** Understand of various concepts of programming language.

**CO-2:** Develop logics and analytical ability solve problem.

**CO-3:** Learn about procedural programming using functions.

**CO-4:** Acquired various flow control statements.

**CO-5:** Learn about various storage classes along with user defined data types.

**CO-6:** Acquire knowledge of file handling

**CO-7:** Work with arrays of complex structure data types.

**CO-8:** Understanding a concept of functional hierarchical code organization.

### **PGDCA-201 Database Management System**

**Upon the completion of the course the learner will be able to**

**CO-1:** Familiarization with various features and applications of Database Management system.

**CO-2:** Acquire knowledge about database languages (DDL, DML, DCL)

**CO-3:** Learn how to design a database by using different data models.

**CO-4:** Understand the database handling during execution of the transactions along with concurrent access.

**CO-5:** Ability to perform various types of SQL queries.

**CO-6:** Able to design a good database using normalization, decomposition and functional dependency

**PGDCA-202 : Introduction to Computer Network, Internet and E-Commerce**

**After completion of this course, students will be able to:**

**CO-1:** Understand the functions of different layers of TCP/IP and OSI reference models.

**CO-2:** Classify of networks-LAN, MAN and WAN.

**CO-3:** Identify and understand various techniques and modes of transmission media with real time applications.

**CO-4:** Understand the fundamentals of Network security.

**PGDCA-203 Object-oriented Programming using C++ & Software Lab – IV (C++ Programming)**

**After the completion of the course the learner will be able to**

**CO-1:** Understand the benefits of Object-Oriented Programming (OOP) as compare to Traditional Programming approach and resolve problem in domain of object-oriented programming.

**CO-2:** Familiarization with a widely range of features of object-oriented programming using C++

**CO-3:** Understand Object oriented approach for finding solutions to various problems with the help of C++ language.

**CO-4:** Understand the concept of polymorphism with the help function overloading and virtual functions.

**CO-5:** Acquire various types of various types and forms of inheritance.

**CO-6:** Understand basic of generic functions and classes.

**PGDCA-204 Software Lab – III (Web Designing, HTML and RDBMS)**

**After completion of this course, students will be able to:**

**CO-1:** Write and debug webpage using HTML and DHTML languages.

**CO-2:** Knowledge and Use of web publishing and phases related with the website development.

**CO-3:** Make use of knowledge related to links, addresses, images, and tables.

**CO-4:** Knowledge of various formatting options on HTML page and web site.

**CO-5:** Knowledge of Server Side programming.