

# Government College, Chhachhrauli (Yamuna Nagar)

## COURSE : POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (PGDCA)

Program Outcome
Post Graduate Diploma in Computer Applications (PGDCA) is a one-year Post-Graduate diploma program recognized by Kurukshetra University, Kurukshetra and follows the syllabus prescribed by the university. After completing the one-year diploma program, the graduate students will be able to attain Programming Skills, Critical Thinking Skills and Employability Skills in the various fields of Software/IT industry. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate program in the field of Computer Science.

Course Outcome
<b>Year: 1<sup>st</sup></b>
<b>Course: CS-DE-11 Computer Organization &amp; Networking Fundamentals</b>
Upon successful completion of the course, students will learn about <ul style="list-style-type: none"><li>• Fundamentals of Computer System and Information Representation</li><li>• Boolean Algebra, Boolean Functions and K-maps</li><li>• Combinational Circuits viz. adder, subtractor, decoder, encoder, multiplexer, de-multiplexer etc.</li><li>• Sequential Circuits viz. Flip-flops, Registers, Counters etc.</li><li>• Fundamentals of Computer Networks and Internet</li></ul>
<b>Course: CS-DE-12 Problem Solving Through ‘C’</b>
Upon successful completion of the course, students will learn about <ul style="list-style-type: none"><li>• Programming Fundamentals</li><li>• Various programming elements of C language</li><li>• Writing programs in C language to solve various situations</li><li>• Develop programming logic and skills</li></ul>
<b>Course: CS-DE-13 Data Structures</b>
Upon successful completion of the course, students will learn about <ul style="list-style-type: none"><li>• Various Linear Data Structures viz. Array, Linked List, Stack, Queue etc.</li><li>• Various Non-linear Data Structures viz. Graph, Tree etc.</li><li>• Use of appropriate data structures for problem solving and programming</li><li>• Use of appropriate searching and/or sorting techniques for application development</li></ul>
<b>Course: CS-DE-14 Data Base Management System</b>
Upon successful completion of the course, students will learn about

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- Database Systems and its architecture
- Various Database Models
- Relational Database Model Concepts
- Functional Dependencies
- SQL and MS-Access Fundamental

### **Course: CS-DE-15 Operating System**

Upon successful completion of the course, students will learn about

- Fundamentals of Operating System and its role in management of computer system resources
- Process management policies and scheduling of processes by CPU
- Deadlock situations and their handling methods
- Memory management and its allocation policies
- File management and File system implementation
- Disk Scheduling and implementation
- Basic understanding of Microsoft Windows and Unix OS

### **Course: CS-DE-16 Software Lab – I Programming using C**

Upon successful completion of the course, students will learn about

- Implementing logics in programming using C language
- Understanding decision making using C language
- Understanding loop structures in C language
- Using functions in C language
- Programming about the concept of arrays, pointer and other user defined structures

### **Course: CS-DE-17 Software Lab – II Word, Excel, Access/SQL**

Upon successful completion of the course, students will learn about

- Developing Word processing documents
- Developing Spreadsheet processing documents
- Using SQL fundamentals
- Using MS-Access fundamentals