Postgraduate Diploma in Computer Application PGDCA

Program Specific Outcomes

1. The aim of PGDCA program is to develop dynamic computer professionals in short time.
2. The program covers all aspects and basics in computer application.
3. It also has projects for developing full software in various software languages along with real time environment.
4. Students are eligible to apply for jobs in various multinational companies, industries and banks.
5. They can start their own business in web development and software development.

I Semester

COURSE TITLE	COURSE LEARNING OUTCOMES
COMPUTER FUNDAMENTALS **PGDCA001**	*After the completion of course, students will be able to-* 1. Understand the basics of computer and its application 2. Understand hardware and software and their working process 3. Understand the primary and secondary memory of computer 4. Differentiate between system software and application software 5. Learn different types of network and topologies 6. Understand different types of communication channels and types of connections
APPLICATON SOFTWARE PACKAGES **PGDCA002**	*After the completion of course, students will be able to-* 1. Understand the basic knowledge of Windows and its version 2. Work with the basic features of word such as create, edit, save and print documents 3. Create high quality document, design and layouts 4. Design a simple database and generate a report 5. Use the database tools to navigate through and edit the simple applications 6. Understand the basic features of MS- Excel 7. Differentiate between formulas and functions in Excel 8. Create a PowerPoint presentation
PROGRAMMING IN C **PGDCA003**	*After the completion of course, students will be able to-* 1. Understand the basic structure of program in C language 2. Create algorithm and flowchart 3. Learn about constant, variable, token, operator, data types 4. Understand the use of different control statements 5. Understand user defined and library function 6. Learn scope of a variable in C programming and different storage classes 7. Learn about array, string, pointer, structure and Union 8. Learn the file access method for creating the file

COURSE TITLE	COURSE LEARNING OUTCOMES
COMPUTER ORGANIZATIONAL AND ARCHITECTURE PGDCA004	*After the completion of course, students will be able to-* 1. Understand fundamental of computer 2. Examine the operation of the major building block of computer system 3. Understand different operators and simplify expressions using logic gates 4. Design different combinational logic circuits 5. Understand different flip flop 6. Understand the importance of control unit 7. Learn about different types of printers and memory 8. Identify different types of storage device and media
SOFTWARE ENGINEERING PGDCA005	*After the completion of course, students will be able to-* 1. Understand software and its process 2. Understand software life cycle model 3. Understand software requirement, specifications and its estimation technique 4. Understand Cost Estimation Models 5. Learn design strategies 6. Understand class diagram, object diagram, case diagram and sequence diagram 7. Understand software testing and its maintenance 8. Understand concept of Software Re-engineering and Software Reverse Engineering
LAB WORK (PAPER 102 103 AND 104) (Practical) PGDCA006	*At the end of the lab work , a student will be able to-* 1. Familiar with MS Office 2. Create programs using C language 3. Use different types of storage devices and printers

II Semester

COURSE TITLE	COURSE LEARNING OUTCOMES
OBJECT ORIENTED PROGRAMMING **PGDCA202**	*After the completion of course, students will be able to-* 1. Describe OOPs concept 2. Understand Classes, Structure, Union, friend function and friend class etc. 3. Learn about array, pointer, dynamic allocation operators 4. Learn constructor, destructor and different types of constructors 5. Learn about function overloading and overload shorthand operator 6. Understand inheritance and its different types 7. Learn different formatted I/O and how to use manipulators to format I/O
DATABASE MANAGEMENT SYSTEM (DBMS) **PGDCA203**	*After the completion of course, students will be able to-* 1. Understand the basic principles of DBMS 2. Differentiate between database management system and traditional database 3. Learn basic structure of SQL 4. Understand relational data model, relational algebra and relational calculus 5. Understand the Hierarchical and Network Data Model, its advantages and disadvantages 6. Learn first, second and third normal forms 7. Learn types of crashes and security in database 8. Learn about integrity rules, domain rules, attribute rules, relation rules, database rules 9. Understand how to use triggers and assertions
INTRODUCTION TO INTERNET TECHNOLOGIES **PGDCA204**	*After the completion of course, students will be able to-* 1. Learn the basics of Internet, email, www, web server, web publishing, ISP etc. 2. Understand Client server architecture and its characteristics 3. Learn FTP, Telnet, Remote logging, internet chatting 4. Learn search engine, its type and working 5. Learn basics of HTML, create, save and view a document in HTML 6. Identify HTML tags 7. Learn how to create, open, save a new web page

COURSE TITLE	COURSE LEARNING OUTCOMES
INTRODUCTION TO LINUX **PGDCA205**	*After the completion of course, students will be able to-* 1. Learn basic features, installing requirements, architecture of UNIX/LINUX 2. Use Linux commands to manage files and file systems 3. Learn how to manage multiple processes and change process priority 4. Learn printing commands and mathematical commands 5. Understand common administrative tasks and the role of system administrator 6. Learn how to check and monitor system performance 7. Learn how to configure hardware 8. Understand basics of shell programming 9. Learn awk programming
PHYTHON PROGRAMMING **PGDCAPL208**	*After the completion of course, students will be able to-* 1. Learn basic features of Python programming 2. Understand different data types, operators, conditional statements, control statements, loop statements etc. 3. Learn to define, calling and types of function 4. Learn about global and local variable 5. Understand how to handle an exception and types of exception 6. Understand different OOPS terminology like Inheritance, Data hiding, Polymorphism, Class, Objects, Attributes etc. 7. Learn to execute queries with Tkinter
PROGRAMMING LAB ON 202 AND 205 (Practical) **PGDCA208**	*At the end of the lab work, a student will be able to-* 1. Perform various office activities on computer system such as installation of software, handling of printers and scanner, internet connection 2. Develop general purpose application based on C++

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