



GKSM Govt College Tanda Urmar

**POSTGRADUATE DIPLOMA
IN
COMPUTER APPLICATIONS**

(Department of Computer Science and Applications)

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PROGRAM OUTCOMES (POs)

On successful completion of Post Graduate Program, Post Graduating Students will be able to

PO1	Enabling students to adapt to the rapidly changing technology with strong fundamentals.
PO2	Basic knowledge in hardware/software methods and tools for solving real-life and practical problems with an orientation to lifelong learning.
PO3	Impart value based technical education and entrepreneurial skills to the graduates through state-of-art infrastructure.
PO4	Educating students towards the design and development of applications and projects with advanced programming skills.
PO5	Learn to create error free documents like lecture scripts, notes, assignment, applications, projects, letters, question papers, books, e-books, and various educational materials.
PO6	PowerPoint presentations helps to speak, read, write and listen clearly and efficiently and improve group work and communication skills.
PO7	Understanding and demonstrating the use of various modern technical tools like table styles, shapes, charts, graphs, data tools and solve basic and logical-mathematical problems and statistics in excel.
PO8	Making use of applications in various business operations, such as goal setting, budgeting process, and planning, team management, accounts management, income, and expenses calculation, product and service valuation and management of client's data etc.
PO9	Learning Programming languages help students to learn the basic inner workings of computers apart from the acquiring Engineering Knowledge.
PO10	Project Management skills are recognized through designing and creating webpages and web applications.
PO11	Sound knowledge base and skill sets to develop and expand professional careers in fields related Information and Communication Technology.
PO12	An ability to work in multidisciplinary teams in small and large scale projects by utilizing technological tools and emerging technologies with skills to communicate effectively.
PO13	Knowledge in data management systems, like data acquisition, report generation so as to enable students in solving problems using the techniques of data analytics.



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PO14	Help students in Critical / Computational Thinking through different computer program coding in C, C++, Java, HTML, CSS, JAVASCRIPT and PHP. Apply Computational Thinking to communicate thoughts in a structured and logical way for easier problem solving.
PO15	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings

Course Outcomes (Cos)

SEMESTER 1

COURSE PGD-1101:- COMPUTER FUNDAMENTALS

CO1	Understanding the concept of input and output devices of Computers.
CO2	Learn the functional units and classify types of computers how they process information and how individual computers interact with other computing systems and devices.
CO-3	Understand an operating system and its working and solve common problems related to operating systems.
CO4	Learn basic word processing Spreadsheet and Presentation Graphics Software skills.
CO5	Study to use the Internet safely, legally, and responsibly.

COURSE PGD-1102:- COMPUTER PROGRAMMING USING C

CO1	Student should be able to understand the logic building used in Programming.
CO2	Students should be able to write algorithms for solving various real life problems.
CO-3	To convert algorithms into programs using C .



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COURSE PGD-1103:- DATABASE MANAGEMENT SYSTEM

CO1	Understand the basic concepts of DBMS.
CO2	Formulate, using SQL, solutions to a broad range of query and data update problems.
CO-3	Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database.
CO4	Understand the concept of Transaction and Query processing in DBMS.

COURSE PGD-1104:- DATA COMMUNICATIONS AND NETWORKS

CO1	Familiar with the different Network Models.
CO2	Understand different network technologies and their application.
CO3	update with different advanced network technologies that can be used to connect different networks.
CO4	familiar with various hardware and software that can help run a smooth network.

COURSE PGD-PR-1105:- LAB BASED ON COMPUTER FUNDAMENTAL AND C PROGRAMMING

CO1	Familiarizing with Open Office (Word processing Spreadsheets and Presentation).
CO2	To acquire knowledge on editor spread sheet and presentation software.
CO3	The students will be able to perform documentation and accounting operations.
CO4	Students can learn how to perform presentation skills.
CO5	Student should be able to understand the logic building used in Programming.
CO6	Students should be able to write algorithms for solving various real life problems.
CO7	To convert algorithms into programs using C .



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COURSE PGD-PR-1106:- LAB BASED ON DATABASE MANAGEMENT SYSTEM

CO1	Able to understand various queries and their execution.
CO2	Populate and query a database using SQL DML/DDL commands.
CO3	Declare and enforce integrity constraints on a database.
CO4	Programming PL/SQL including stored procedures, stored functions, cursors, packages.
CO5	Able to design new database and modify existing ones for new applications and reason about the efficiency of the result.

SEMESTER 2

COURSE PGD-2101:- OBJECT ORIENTED CONCEPTS USING JAVA

CO1	Able to solve real world problems using OOP techniques.
CO2	Able to understand the use of abstract classes.
CO3	Able to solve problems using java collection framework and I/o classes.
CO4	Able to develop multithreaded applications with synchronization.
CO5	Able to develop applets for web applications.
CO6	Able to design GUI based applications.

COURSE PGD-2102:- WEB TECHNOLOGIES

CO1	Understand the core concepts of Internet and Web Services.
CO2	Describe and differentiate Programming Language and Markup Language.
CO3	List various web pages and web sites together.
CO4	Capture user input from the remote users.
CO5	Learn connectivity concepts of Front End and Back End process.



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COURSE PGD-2103:- SOFTWARE ENGINEERING

CO1	Aware about the engineering approach to analysis, design and built the software.
CO2	Understand the phases and activities involved in the conventional software life cycle models.
CO3	Analyse problems, and identify and define the computing requirements appropriate to its solution.
CO4	Apply design and development principles in the construction of software systems of varying complexity.
CO5	Apply current techniques, skills, and tools necessary for computing practice.

COURSE PGD-2104:- COMPUTER BASED ACCOUNTING

CO1	To introduce the students to Basic of Accounts .
CO2	To help students to work with well- known accounting software.
CO3	Students will learn to create company, enter accounting voucher entries including advance voucher entries, do reconcile bank statement, do accrual adjustments, and also print financial statements.
CO4	Demonstrate an understanding of various predefined inventory vouchers to suit the various business requirements and flexibility to create unlimited stock items, use simple to complex conversion units and generate invoices with the required information and dimensions.
CO5	Demonstrate an understanding of how to maintain a payroll register. This helps to understand how to maintain management related information, statutory forms and reports in the prescribed formats such as Pay Slip ,Payroll Statements, Attendance and Overtime Registers etc.
CO6	Develop the students use the Tally software, that helps to prepare Accounting, Payroll, Billing, Sales and Profit Analysis, Auditing Banking Inventory, Taxation such as GST, VAT, TDS, TCS etc.

COURSE PGD-PR-2105:- LAB BASED ON JAVA

CO1	Learn basic concepts Java Programming Language.
CO2	Acquire knowledge of control structures.
CO3	Familiarize in Java Programming.



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CO4	Create wide range of Applications and Applets using Java.
CO5	Ability to work with I/O Streams.

COURSE PGD-PR-2106:- LAB BASED ON WEB TECHNOLOGIES

CO1	Implement Static/Dynamic concepts of web designing.
CO2	Develop ability to retrieve data from a database and present it in a web page.
CO3	Design web pages that apply various dynamic effects on the web site.

COURSE PGD-2107:- PROJECT WORK

CO1	Able to design a basic web site using HTML and CSS to demonstrate responsive web design.
CO2	Learn how to implement dynamic web pages with validation using JavaScript objects by applying different event handling mechanism.
CO3	Able to develop simple web application using server side PHP programming.