



श्री **D**avara **U**niversity

Established under Chhattisgarh Private Universities (Establishment and Operation) Act, 2005

PGDCA

SEMESTER-I

Programme Curriculum



Part –A: Introduction		
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)	SEMESTER-I	Session:2025-26
Subject Code	PGDCAC 101	
Course Name	INTRODUCTION TO S/W ORGANISATION	
Course Learning Outcomes(CLO)	<p>At the end of this course, the students will be able</p> <ul style="list-style-type: none"> • Understand concept of software and functionalities of software. • Understand various models to design software's. • Understand SDLC process. 	
Course Value	4 Credits	Credit-15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min. Marks:40
PART -B: Content of the Course		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	<p>Introduction to Computers Fundamentals: Introduction to computer systems, characteristics, strengths, and limitations. History & Evolution: Development of computers, types of computers, and computer generations. Personal Computers (PCs): Uses and evolution of PCs. Hardware Components: Internal components and PC configuration. Processor Evolution: Development of processors and the architecture of Pentium IV. Peripherals: Input devices and output devices.</p>	15
2	<p>Computer Organization Central Processing Unit – Arithmetic Logic Unit, Control Unit, Registers, Instruction Set, Processor speed. Storage Devices – Storage and its need, Storage Evaluation Units, Primary Storage, Secondary Storage, Data Storage and Retrieval Systems, SIMM, DIMM, Types of Storage Devices.</p>	15
3	<p>Computer Software Basics of Software – needs of Software, Types of Software; Free Domain Software; Open-Source Software; Compiler, Interpreter and Assembler; Linker and Loader; Debugger; Integrated Development Environment; Operating System –Introduction, Uses of OS, Functions of OS, Booting process, Types of Reboot, Booting from different OS, Types of OS, DOS, Windows, Linux.</p>	15
4	<p>Programming Languages – Introduction, Comparison between Human</p>	15



	and Computer Language; Program; Data, Information and Knowledge; Characteristics of Information; Types of Programming Languages; Generation of Languages; Program Development Steps; Programming Paradigms; Object-Oriented Programming; Structured Programming, Functional Programming, Process Oriented Programming.	
PART-C: Learning Resources		
<p>Books Recommended:</p> <ul style="list-style-type: none"> • Introduction to Computers and Information Technology – Anurag Seetha (Ram Prasad & Sons, Bhopal). • Fundamentals of IT – Chetan Shrivastava. • Fundamentals of Computers – P.K. Sinha. • Computer Networks – Andrew S. Tanenbaum. <p>Online resources:</p> <p>CIT-001: Fundamentals of Computer Systems – Course. https://onlinecourses.swayam2.ac.in/nou20_cs03/preview.</p>		
PART -D: Assessment and Evaluation		
<p>Suggested Continuous Evaluation Methods:</p> <p>Maximum Marks: 100 marks Continuous Internal Assessment (CIA): 30 Marks. End Semester Exam (ESE): 70 marks</p>		
Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	<p>Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit- 4x10=40 marks</p>	



Part -A Introduction		
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)	SEMESTER-I	Session:2025-26
Subject Code	PGDCAC 102T	
Course Name	PROGRAMMING IN C	
Course Learning Outcomes(CLO)	<p>At the end of this course, the students will be able</p> <ul style="list-style-type: none"> • Understand programming language and its functionalities. • Understand operators and various conditions and looping statements. • Understand compiler and linker loader. • Understand approaches of programming language. 	
Course Value	4 Credits	Credit-15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min. Marks:40
PART B: CONTENTS/TOPICS		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	Introduction Character set, Identifiers and Keywords, Variables, Displaying variables, Reading Variables, Character and Character String, Qualifiers, Type define Statements, Value initialized variables, Constants, Constant Qualifier, Operators and Expressions, Operator Precedence and Associativity, Basic input output: Single Character I/O, Types of Characters in format string, Scanf with specifier.	15
2	Control Structure: If-statement, If-else statement, Multi decision, Compound Statement, Loops: For - loop, While -loop, Do-While loop, Break statement, Switch statement, Continue statement, Go-to statement.	15
3	Functions: Function main, Functions accepting more than one parameter, User defined and library functions, Concept associatively with functions, function parameter, Return value, recursion comparisons of Iteration and recursion variable length argument list. Arrays: Scope and Extent, Multidimensional Arrays, Array of Strings, Function in String, passing arrays to functions, accessing array inside functions.	15
4	Pointers: Definition and use of pointer, address operator, pointer variable, referencing pointer, void pointers, pointer arithmetic, pointer to pointer, pointer and arrays, pointer and functions, pointers and two dimensional arrays, array of pointers, pointers constants, pointer and strings.	15



PART-C: Learning Resources

Books Recommended:

1. Computer Fundamentals, P.K. Sinha, BPB Publication
2. Computer Fundamental and Concepts, V. Raja Raman, PHI
3. Computers Today, S.K. Basandra, Galgotia Publications
4. Programming in C ,by E. Balaguruswamy, Tata McGraw Hill
5. Let us C , by Kanetkar , BPB Publication

Online resources:

1. Introduction to C Programming. <https://share.google/azabuWvcM6vvaeHkF>.

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit-4x10=40 marks	



Part -A Introduction		
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)	SEMESTER-I	Session:2025-26
Subject Code	PGDCAC 103T	
Course Name	OFFICE AUTOMATION	
Course Learning Outcomes(Clo)	<p>At the end of this course, the students will be able</p> <ul style="list-style-type: none"> • Understand computer types, generation and etc. • Understand working of MS word and functionality of word. • Understand working of MS excel and functionality of excel. • Understand working of MS access and functionality of access. • Understand working of MS PowerPoint and functionality of PowerPoint. 	
Course Value	4 Credits	Credit-15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min. Marks:40
PART B CONTENTS/TOPICS		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	<p>Word Processing & Spreadsheet Word: Creating, Editing, & Previewing Documents, Formatting, Advanced Features, Using Thesaurus, Mail-Merge, Table & Charts, Handling Graphics, Converting Word Documents into other Formats.</p> <p>Excel: Worksheet Basics, Creating, Opening, & Moving in Worksheet, Working with Formula & Cell referencing, Absolute & Relative addressing, Working with Ranges, Formatting of Worksheet, Graphs & Charts, Database, Function, and Macros.</p>	15
2	<p>PowerPoint: Creating a presentation, Modifying visual Elements, Adding objects, Applying Transitions, animations and linking, preparing handouts, presenting a slide show. Creating presentation, working with slides, different types of slides, setting page layout, selecting background and applying design, adding graphics to slide, adding sound and movie, working with table, creating chart and graph, playing a slide show, slide transition, advancing slides, setting time, rehearsing timing, animating slide, animating objects, running the show from windows.</p>	15
3	<p>Introduction to MS Access: The Tables of a Database, Introduction to the Record of a Table, Introduction to Controls Design, Details on Controls Design, The Characteristics of a Table, The Characteristics of a Form, The Characteristics of a Window Control, Data Controls,</p>	15



	Introduction to Data Expressions, Getting Assistance with Data Entry, Database Strings, Database Numeric Values, Database Conditional Values, Database Date and Time Values, Creating Reports, Characteristics of Reports. Multiple queries and switch boards manage	
4	Microsoft Publisher- introduction, broacher, advertisement, article, business card, catalogue, import, export.	15

PART-C: Learning Resources

Books Recommended:

1. Computer Basics with Office Automation, IK International Publishing House Pvt. Ltd (1January2011), Archana Kumar
2. Front-Office management, Firewall Media
3. PC Software For Windows By R. K. Taxali–Tata McGraw-Hill

Online Resources:

1. Course in Information Technology. <https://share.google/HRbBbkBdqyw995Vst>.

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit-4x10=40 marks	



Part -A Introduction		
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)	SEMESTER-I	Session:2025-26
Subject Code	PGDCAC 104T	
Course Name	ESSENTIALS OF E-COMMERE & HTML	
Course Learning Outcomes(Clo)	At the end of this course, the students will be able <ul style="list-style-type: none"> • Understand computer network and functionalities. • Understand website and WebPages and its making process. • Understand website terminology. 	
Course Value	4 Credits	Credit-15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min. Marks:40
PART B CONTENTS/TOPICS		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	Introduction to Electronic Commerce: The scope of E-commerce; Size, growth and future projection of E-commerce market Worldwide and in India; Internet and its impact on traditional businesses; Definition of E-commerce; Business models in E-Commerce environment; Case studies. Emergence of E-commerce-E-commerce on private networks, Electronic Data Interchange (EDI), What is EDI,EDI in action, EDI basics, EDI standards, financial EDI, FEDI for international trade transaction, FEDI payment system within the US, ACH credit transfer payment system FEDI, application of EDI, benefits of EDI, Electronics Payment system, E-commerce on the web, E-commerce in India.	15
2	Internet, Security and E-Commerce: Security of Data / Information in Internet / web environment; Client security, Network security; Virus protection and Hacking; Security Measures: Authentication, Integrity, Privacy, Non-repudiation; Public information, Private information, firewall tunnels, encryption, secret key encryption, public key encryption, digital signature. Business-to-Business (B2B), Business-to-Consumer (B2C); Business-to-Business-to-Consumer (B2B2C) and Consumer-to-Consumer (C2C) E-Commerce.	15
3	HTML Basics & Web Site Design Principles: Concept of a Web Site, Web Standards, What is HTML? HTML Versions, Naming Scheme for HTML Documents , HTML document/file, HTML Editor , Explanation of the Structure of the homepage , Elements in HTML Documents	15



	<p>,HTML Tags, Basic HTML Tags, Comment tag in HTML, Viewing the Source of a web page, How to download the web page source? XHTML, CSS, Extensible Markup Language (XML), Extensible Style sheet language (XSL), Some tips for designing web pages, HTML Document Structure. HTML Document Structure-Head Section, Illustration of Document Structure,<BASE>Element,<ISINDEX> Element,<LINK> Element, META, <TITLE> Element,<SCRIPT> Element ,Practical Applications, HTML Document Structure-Body Section:- Body elements and its attributes: Background; Background Color; Text; Link; Active Link(ALINK);VisitedLink(VLINK);Leftmargin;Topmargin,Organization ofElementsintheBODYofthedocument:Text Block Elements; Text Emphasis Elements; Special Elements – Hypertext Anchors; Character-Level Elements; Character References ,Text Block Elements: HR (Horizontal Line); H(Headings); P(Paragraph); Lists; ADDRESS; BLOCKQUOTE; TABLE; DIV(HTML3.2and up); PRE(Preformatted); FORM, Text Emphasis Elements, Special Elements -- Hypertext Anchors ,Character-Level Elements: line breaks (BR) and Images (IMG),Lists ,ADDRESS Element, BLOCKQUOTE Element, TABLE Element ,COMMENTS in HTML, CHARACTER Emphasis Modes, Logical & Physical Styles, Netscape, Microsoft and Advanced Standard Elements List, FONT, BASE FONT and CENTER.</p>	
4	<p>Image, Internal and External Linking between Web Pages - Netscape, Microsoft and Advanced Standard Elements List, FONT, BASE FONT and CENTER. Insertion of images using the element IMG (Attributes: SRC (Source), WIDTH, HEIGHT, ALT (Alternative), ALIGN), IMG (In-line Images) Element and Attributes; Illustrations of IMG Alignment, Image as Hypertext Anchor, Internal and External Linking between Web Pages. Hypertext Anchors, HREF in Anchors, Links to a Particular Place in a Document, NAME attribute in an Anchor, Targeting NAME Anchors, TITLE attribute, Designing Frames in HTML.</p>	15

PART-C: Learning Resources

Books Recommended:

- HTML & XHTML: The Complete Reference, 5th Edition – Thomas A. Powell.
- Web Design in a Nutshell, Second Edition – Jennifer Niederst Robbins (September 2001).
- Learning Web Design: A Beginner's Guide to HTML, Graphics, and Beyond – Jennifer Niederst Robbins.
- Introduction to HTML – Kamlesh N. Agarwala.
- Introduction to HTML – O.P. Vyas and Prateek A. Agarwala (Kitab Mahal Publications).
- ASP Developer's Guide – Greg Buczek (Tata McGraw Hill).
- Data Communications and Networking – Behrouz A. Forouzan.
- Computer Networks – Andrew S. Tanenbaum.
- Business on the Net – Kamlesh N. Agarwala, Amit Lal, and Deeksha Agarwala (Macmillan India Ltd.).

Online Recommended Resources:

- E-Commerce - Online Courses Swayam 2 <https://share.google/a5x9d7qvSpuH7P9sj>.



- Web Technology: https://onlinecourses.swyam2.ac.in/nou24_cs18/preview.

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit- 4x10=40 marks	



PART-A:Introduction			
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)		SEMESTER-I	Session:2025-26
Course Code	PGDCAC 103P		
Course Title	Office Automation		
Course Type	Practical		
Prerequisite	As per program		
Course Learning Outcomes (CLO)	At the end of this course, the students will be able <ul style="list-style-type: none"> • Understand computer network and functionalities. • Understand website and WebPages and its making process. • Understand website terminology. 		
Credit Value	2 Credits	Credit-30 Hours – Lab practical’s & training	
Total Marks	Max. Marks:50		Min marks -20
PART -B: Content of the Course			
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)			
Module	Topics(Course Content)		No. of Period
List of practical’s Experiments	<ol style="list-style-type: none"> 1. Create a document and <ul style="list-style-type: none"> • Put bullets and number, apply various font parameters. • Apply left, right, and centre alignment, apply hyperlinks, insert picture, insert clip art, show the use of word art. • Add borders and shading, show the use of find and replace, apply header footer. 1. Create your resume using general templates. 3. Create a student table and do the following. <ul style="list-style-type: none"> • Insert new row and fill data • Delete any existing row • Resize rows and columns • Apply border and shading/apply merging/splitting of cells/apply sort • Apply various arithmetic and logical formulas 4. Implement the concept of mail merge. 5. Creating worksheet. 		30



	<p>6. Entering data into worksheet.</p> <p>7. Generation of mark sheet of a students.</p> <p>8. Figures of company for last three years through appropriate chart.</p> <p>9. Make presentation of college.</p> <p>10. Education system using: blank presentation, from design template</p> <p>11. Make a presentation on “wild life” and apply the following.</p> <p>12. Add video and audio effects, apply various color schemes, apply various animation schemes, apply slide show</p> <p>Note: Concerned teacher can add additional experiment as per requirement</p>	
--	--	--

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 marks
 Continuous Internal Assessment (CIA): 15 Marks.
 End Semester Exam (ESE): 35 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-10 & 10 Assignment /seminar-05 Total marks:-15	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce(based on principle/technology)- 5 marks	



PART-A:Introduction		
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)	SEMESTER-I	Session:2025-26
Course Code	PGDCAC 102P	
Course Title	PROGRAMMING IN “C”	
Course Type	Practical	
Prerequisite	As per program	
Course Learning Outcomes (CLO)	At the end of this course, the students will be able <ul style="list-style-type: none">• Understand programming language and its functionalities.• Understand operators and various conditions and looping statements.• Understand compiler and linker loader.• Understand approaches of programming language.	
Credit Value	2 Credits	Credit-30 Hours – Lab practical’s & training
Total Marks	Max. Marks:50	Min marks -20
PART -B: Content of the Course		
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)		
Module	Topics(Course Content)	No. of Period
List of practical’s Experiments	<ol style="list-style-type: none">1. Environment Setup: Setting up the environment for C programming.2. Compiler Installation: Installing compilers via Command Line (GCC) and IDEs (Code::Blocks, VS Code, etc.).3. Using IDEs: Navigating and managing projects within an Integrated Development Environment.4. Basic Output: Displaying various messages on the screen using printf.5. User Input: Programs to take input from the user using scanf.6. Arithmetic: Programs performing simple arithmetic operations7. Conditional Logic: Programs to display criteria-based results (If-Else, Switch-Case).8. Input Validation: Programs to take input based on specific criteria.9. Unit Conversions: Programs for converting units (e.g., Celsius to	30



	<p>Fahrenheit, Kilometers to Miles).</p> <ol style="list-style-type: none">10. Iterative Operations: Using loops (for, while, do-while) for repetitive tasks.11. Number Series: Generating mathematical series (Fibonacci, Factorial, etc.).12. Special Numbers: Checking for characteristic numbers (Prime, Armstrong, Palindrome).13. Pattern Printing: Creating specific visual patterns using nested loops.14. Functions: Creating and calling user-defined functions.15. Recursion: Programs utilizing self-referential functions.16. Preprocessors: Using C preprocessor directives (e.g., #define, #include).17. Storage Classes: Demonstrating auto, static, extern, and register.18. Data Handling: Data type handling, typecasting, and conversions.19. Pointers: Introduction to memory addresses and pointer variables.20. Arrays: Handling single-dimensional arrays.21. Matrix Calculations: Performing operations on 2D arrays (Addition, Multiplication).22. Pointers & Arrays: Demonstrating the relationship between pointers and array elements.23. Functions & Arrays: Passing arrays to functions as arguments.24. String Handling: Dealing with strings using library functions (string.h) and pointers.25. Structures & Unions: Creating user-defined data types using struct and union. <p>Note: Concerned teacher can add additional experiment as per requirement</p>	
--	--	--



PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 marks
Continuous Internal Assessment (CIA): 15 Marks.
End Semester Exam (ESE): 35 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-10 & 10 Assignment /seminar-05 Total marks:-15	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce(based on principle/technology)- 5 marks	
Name and Signature of Convener & Members of CBoS.		



PART-A:Introduction			
POST GRADUATE DIPLOMA IN COMPUTER APPLICATION(PGDCA)		SEMESTER-I	Session:2025-26
Course Code	PGDCAC 104P		
Course Title	HTML LAB		
Course Type	Practical		
Prerequisite	As per program		
Course Learning Outcomes (CLO)	At the end of this course, the students will be able <ul style="list-style-type: none"> • Understand website and WebPages and its making process. • Understand website terminology. 		
Credit Value	2 Credits	Credit-30 Hours – Lab practical's & training	
Total Marks	Max. Marks:50	Min marks -20	
PART -B: Content of the Course			
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)			
Module	Topics(Course Content)		No. of Period
List of practical's Experiments	<ol style="list-style-type: none"> 1. Introduction to basic HTML elements. 2. Design a timetable and display it in a tabular format. 3. Create a stylesheet to set formatting for text tags and embed it. 4. Create your profile page including educational details, hobbies, achievements, and ideals. 5. Design a web page and embed various multimedia features. 6. Write an HTML and JavaScript program to determine whether a given year is a leap year in the Gregorian calendar. 7. Write an HTML and JavaScript program to convert temperatures to and from Celsius and Fahrenheit. 8. Create a static web page using HTML table tags. 9. Create a static web page that defines all HTML text formatting tags in a tabular format. 		30



10. Create a web page to include images using the HTML tag.	
11. Create an employee registration web page using HTML form objects.	
12. Create a web page using HTML list tags.	
Note: Concerned teacher can add additional experiment as per requirement.	

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 marks
Continuous Internal Assessment (CIA): 15 Marks.
End Semester Exam (ESE): 35 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-10 & 10 Assignment /seminar-05 Total marks:-15	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce(based on principle/technology)- 5 marks	



**PROGRAMME CURRICULUM
FOR
POST GRADUATION DIPLOMA IN COMPUTER APPLICATION
SEMESTER-II**



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

SEMESTER II

S.NO	COURSE CODE	COURSE TITLE	TEACHING HOURS PER WEEK				EXAMINATION SCHEME				
			L	T	P	C	THEORY		PRACTICAL		TOTAL MARKS
THEORY							EX	IN	EX	IN	
1.	PDCAC 201	Introduction to Digital marketing	3	1	0	4	70	30	-	-	100
2.	PDCAC 202	Introduction to Tally	3	1	0	4	70	30	-	-	100
3.	PDCAC 203	Database Management System	3	1	0	4	35	15	-	-	100
PRACTICALS											
4.	PDCAP 204	Digital Marketing-Lab	0	0	4	2	-	-	35	15	50
5.	PDCAP 205	Database Management System Lab	0	0	4	2	-	-	35	15	50
6.	PDCAP 206	Tally- Lab	0	0	4	2	-	-	35	15	50
7.	PGDCAC207	Project	0	0	4	2	-	-	70	30	100
Total Contact hours Per Week: 22		Total credit:				20	Total mark				550



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

Part -A Introduction		
Post graduate diploma in computer application (PGDCA)	Semester-II	Session: 2025-26
Subject Code	PGDCAC201	
Course Name	Programming in Python	
Course Learning Outcomes (CLO)	At the end of this course, the students will be able: <ul style="list-style-type: none"> • Foundational Logic and Syntax • Data Structures and Algorithmic Thinking • Modular Programming and File I/O • Advanced Programming Paradigms 	
Course Value	4 Credits	Credit-15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min. Marks:40
PART B CONTENTS/TOPICS		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	Introduction: History, Features, Setting up path, working with Python, Basic Syntax: Variable and Data Types, Operator, Conditional Statements: If, If-else, Nested if-else	10
2	Looping: For, While, Nested loops Control Statements: Break, Continue, And Pass. String Manipulation: Accessing Strings, Basic Operations, String slices, Function and Methods. Lists: Introduction, Accessing list, Operations, Working with lists, Function and Methods. Tuple: Introduction, Accessing tuples, Operations, Working, Functions and Methods	10
3	Dictionaries: Introduction, Accessing values in dictionaries, working with dictionaries, Properties Functions: Defining a function calling a function Types of functions Function Arguments Anonymous functions Global and local variables Modules: Importing module Math module Random module Packages Composition Input-Output: Printing on screen Reading data from keyboard Opening and closing file Reading and writing files Functions	10
4	Exception Handling: Exception, Exception Handling Except clause Try? Finally clause User Defined Exceptions OOPs concept: Class and object Attributes Inheritance Overloading Overriding Data hiding Regular expressions: Match function Search function Matching VS Searching Modifiers Patterns	10
PART-C: Learning Resources		
Text book recommended:		
<ul style="list-style-type: none"> • "Python Crash Course" by Eric Matthes (3rd Edition) • "Automate the Boring Stuff with Python" by Al Sweigart • Python 3 Object-Oriented Programming" by Dusty Phillips • Fluent Python" by Luciano Ramalho 		



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

Online resources:

- University of Helsinki: Python Programming MOOC <https://programming-25.mooc.fi/>
- Harvard CS50P (Introduction to Programming with Python) <https://cs50.harvard.edu/python/>
- Official Python Tutorial <https://docs.python.org/3/tutorial/index.html>

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit- 4x10=40 marks	



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

PART-A: Introduction		
Post graduate diploma in computer application (PGDCA)	Semester-II	Session: 2025-26
Course Code	PGDCA202	
Course Title	Introduction to Tally	
Prerequisite	As per program	
Course Learning Outcomes (CLO)	At the end of this course, the students will be able <ul style="list-style-type: none"> To able understand tally and its factions. Practice data handing in tally. Understand about bank transaction and Tally as software. To understand GST calculation and advanced accounting. 	
Credit Value	4 Credits	1 Credit = 15 Hours - Learning & Observation
Total Marks	Max. Marks:100	Min marks -40
PART -B: Content of the Course		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
Unit	Topics (Course Content)	No. of Period
1	Accounting Basics: Introduction to accounting principles - Journal entries, ledgers, trial balance Final accounts, Tally Interface and Navigation: Understanding the user interface, Data entry and modification, Masters Creation (company, accounts, ledgers, and group inventory).	15
2	Transactions and Vouchers: Recording purchases, sales, receipts, payments Creating vouchers (sales, purchase, contra) - Bank reconciliation, Transaction other than purchase sales, Tally as software and banking. Formats. Bill-wise -wise details, cost accounting and interest calculation.	15
3	Reports and Analysis: Generating basic reports (profit & loss, balance sheet, cash flow) - Exporting reports to other GST and Taxation: Understanding GST basis-Creating GST invoices and filing returns. Inventory Management: Basic stock management (adding, deleting, modifying items) Stock valuation methods.	15
4	Advance Accounting: Bill Wise Details, Currency, Interest Calculation, Job Work, manufacturing, Inventory management, Tally Security, GST. Tally Prime: TDS (Other Than Salary) theory, TDS Deduction, Challan etc. Practical Using Tally, Reports etc. Payroll: Legal terms, PF, ESI, TDS, etc. Setup with Tally-Process, Masters, Salary, Accounting Reports.	15
PART-C: Learning Resources		
Books Recommended:		
<ol style="list-style-type: none"> 7. Frontiers of Electronic Commerce: Ravi Kalakota, Andrew B. Whinston 8. Tally Essential: Tally Education Pvt. Ltd. 9. Learn Tally Prime With GST: Gaurav Agrawal 		



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

4. 10. Mastering Tally PRIME Training. Certification & Job.

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE):	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit-4x10=40 marks	



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

Part -A Introduction		
Post graduate diploma in computer application (PGDCA)	Semester-II	Session: 2025-26
Subject Code	PGDCAC203	
Course Name	DATABASE MANAGEMENT SYSTEM	
Course Learning Outcomes(CLO)	<ul style="list-style-type: none">• Understand concept of database and functionalities.• Understand levels of database its making process.• Understand sql languages to handle tables.• Understand models of database management system.	
Course Value	4 Credits	4 Credits
Total Marks	Max. Marks:100	Max. Marks:100
PART B CONTENTS/TOPICS		
Total No. of Teaching-Learning Periods (01 Hr. per period)-60 Periods (60 Hours) No. of Topics (Course contents)		
UNIT	TOPICS	NO. OF PERIODS
1	Introduction To DBMS: Data, Information and knowledge, concept of DBMS, Advantages of DBMS, data independence, database Administration roles, DBMS architecture, different kinds of DBMS users, importance of data dictionary, contents of data dictionary, types of database languages. Data models: network, hierarchical, relational, Introduction to ODBC concept.	15
2	E-R Model: Entity - Relationship model as a tool for conceptual design-entities, attributes and relationships. ER diagrams; Concept of keys; Case studies of ER modeling Generalization; specialization and aggregation.	15
3	Relational Model: Structure to Relational Database, Relational Algebra, and Extended Relational- Algebra Operation, Simple and complex queries using relational algebra, The Domain Relational Calculus, Tuple relational calculus. Relational Database Design. Pitfalls in Relational Database Design, Decomposition, Functional Dependencies, Normalization: 1NF, 2NF, BCNF, 3NF, 4NF, 5NF.	15
4	Structured Query Language: DDL and DML: Creating Table, Specify Integrity Constraint, Modifying Existing Table, Dropping Table, Inserting, Deleting and Updating Rows in as Table, Where Clause, Operators, ORDER BY, GROUP Function, SQL Function, JOIN, Set Operation, SQL Sub Queries. Views: What is Views, Create, Drop and Retrieving data from views?	15
PART-C: Learning Resources		



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

BOOKS RECOMMENDED

1. "Database System Concepts" – Silberschatz, Korth, and Sudarshan (McGraw Hill).
2. "Introduction to Database Management Systems" – ISRD Group (Tata McGraw Hill, 2006).
3. "An Introduction to Database Systems" – C.J. Date.
4. "Introduction to Relational Database and SQL Programming" – Allen (Tata McGraw Hill).
5. "SQL" – Scott Urman.
6. "Database Management Systems" – Alexies & Mathews.
7. "Database Management Systems" – Raghu Ramakrishnan and Johannes Gehrke.

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 100 marks

Continuous Internal Assessment (CIA): 30 Marks.

End Semester Exam (ESE): 70 marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-20 & 20 Assignment /seminar-10 Total marks: -30	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 30 marks.
End Semester Exam (ESE)	Two section- A&B Section A: Q1. Objective-10 marks: Q2. Short answer type-5x4=20 marks Section B: Descriptive answer type questions, 1 out of 2 from each unit-4x10=40 marks	



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

PART-A:Introduction		
Post graduate diploma in computer application (PGDCA)	Semester-II	Session: 2025-26
Course Code	PGDCAC204	
Course Title	Python-Lab	
Course Type	Practical	
Prerequisite	As per program	
Course Learning Outcomes (CLO)	At the end of this course, the students will be able: <ul style="list-style-type: none"> • To understand digital marketing tools and application. • Learn to build website & optimization. • Learn social media advertizing. • To practice using social media advertizing applets. 	
Credit Value	2 Credits	Credit-30 Hours – Lab practical’s & training
Total Marks	Max. Marks:50	Min marks -20
PART -B: Content of the Course		
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)		
Module	Topics(Course Content)	No. of Period
List of practical’s Experiments	<ol style="list-style-type: none"> 1. Program to print "Hello User" 2. Program to find whether a number Odd or Even Program to make a Calculator 3. Program to find Leap Year Checker 4. Program to find Multiplication Table 5. Program to Palindrome Checker 6. Program to Vowel Counter 7. A program that asks for user input and appends it to a .txt file 8. Create a Book class with attributes like title and author 9. Use the re module and the search() function to check if a user-provided string follows a valid email format (e.g., user@domain.com). Note: Concerned teacher can add additional experiment as per requirement	30
PART -D: Assessment and Evaluation		
Suggested Continuous Evaluation Methods:		
Maximum Marks: 50 marks		
Continuous Internal Assessment (CIA): 15 Marks.		
End Semester Exam (ESE): 35 marks		
Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-10 & 10 Assignment /seminar-05 Total marks:-15	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment <ol style="list-style-type: none"> A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce(based on principle/technology)- 5 marks 	



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

PART-A: Introduction		
Post graduate diploma in computer application (PGDCA)		Semester-II
Session: 2025-26		
Course Code	PDCAP 205	
Course Title	DATABASE MANAGEMENT SYSTEM LAB	
Course Type	Practical	
Prerequisite	As per program	
Course Learning Outcomes (CLO)	At the end of this course, the students will be able: <ul style="list-style-type: none"> • Understand concept DBMS and its functionalities. • Understand relationship between tables. • Understand various models of DBMS. • Understand various languages. 	
Credit Value	2 Credits	Credit-30 Hours – Lab practical’s & training
Total Marks	Max. Marks:50	Min marks -20
PART -B: Content of the Course		
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)		
Module	Topics(Course Content)	No. of Period
List of practical’s Experiments	<ol style="list-style-type: none"> Using the following database, <ol style="list-style-type: none"> Colleges (cname, city, address, phone, afdte) Staffs (sid, sname, saddress, contacts) StaffJoins (sid, cname, dept, DOJ, post, salary) Teachings (sid, class, paperid, fsession, tsession) Subjects (paperid, subject, paperno, papename) Write SQL statements for the following – Create the above tables with the given specifications and constraints. Insert about 10 rows as are appropriate to solve the following queries. List the names of the teachers teaching computer subjects. List the names and cities of all staff working in your college. List the names and cities of all staff working in your college who earn more than 15,000 Find the staffs whose names start with ‘M’ or ‘R’ and ends with ‘A’ and / or 7 characters long. Find the staffs whose date of joining is 2024. Modify the databases of that staff N1 now works in C2 College. List the names of subjects, which T1 teaches in this session or all sessions. 	30



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

	Note: Concerned teacher can add additional experiment as per requirement	
Suggested Continuous Evaluation Methods: Maximum Marks: 50 marks Continuous Internal Assessment (CIA): 15 Marks. End Semester Exam (ESE): 35 marks		
Continuous Internal Assessment (CIA): (By Course Teacher)	Internal test/Quiz:-10 & 10 Assignment /seminar-05 Total marks:-15	Better marks out of the two test/Quiz+ obtained marks in assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce(based on principle/technology)- 5 marks	



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

PART-A: Introduction		
Post graduate diploma in computer application (PGDCA)	Semester-II	Session: 2025-26
Course Code	PDCAP 206	
Course Title	Introduction About Tally	
Course Type	Practical	
Prerequisite	As per program	
Course Learning Outcomes (CLO)	<p>At the end of this course, the students will be able:</p> <ul style="list-style-type: none"> Students will be able to work independently on Tally for accounting and GST tasks. To calculate Advance accounting. 	
Credit Value	1 Credits	1 Credit = 30 Hours – Lab practical’s & training
Total Marks	Max. Marks:50	Min marks -20
PART -B: Content of the Course		
Total No. of Learning Training / Performance Periods (01 Hr. per period)-30 Periods (30 Hours)		
Module	Topics(Course Content)	No. of Period
List of practical’s Experiments	<p>1. Journal Entries:</p> <p>a) Record the following transactions:</p> <ol style="list-style-type: none"> Sold goods worth ₹50,000 to XYZ Enterprises. Received 50% payment via cheque. Paid rent expense of ₹10,000 by cash. Purchased machinery worth ₹1, 00,000 on credit from ABC Suppliers. <p>2. Ledger Maintenance:</p> <p>a) Create ledger accounts for the following:</p> <ol style="list-style-type: none"> Furniture Salary Expense Capital Account <p>3. Perform shortcut key for: How to go to list of Ledgers.</p> <p>4. Trial Balance & Final Accounts:</p> <p>a) Prepare a trial balance from the ledger accounts created in question 2.</p> <p>b) Prepare trading and profit & loss account for the following information:</p> <ol style="list-style-type: none"> Sales: ₹2,00,000 Purchases: ₹1,50,000 Rent Expense: ₹10,000 Salary Expense: ₹20,000 <p>c) Prepare a balance sheet considering the capital account balance as ₹1,50,000.</p> <p>5. Recording Purchases, Sales, Receipts, and Payments:</p> <p>a) Record the following transactions:</p> <ol style="list-style-type: none"> Purchased goods worth ₹30,000 from LMN Traders on credit. 	30



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

	<ul style="list-style-type: none"> ii. Sold goods worth 40,000 to ABC Corporation. Received 60% payment via bank transfer. iii. Received ₹15,000 from debtors. iv. Paid electricity bill amounting to ₹5,000 by cheque. <p>6. Creating Vouchers:</p> <ul style="list-style-type: none"> a) Create the following vouchers: <ul style="list-style-type: none"> i. Sales voucher for selling goods worth ₹60,000 to PQR Enterprises. ii. Purchase voucher for purchasing office supplies worth 20,000 from DEF Suppliers. iii. Contra voucher for depositing ₹10,000 cash into the bank account. <p>7. Perform shortcut key for: Open the Calculator within Tally Prime.</p> <p>8. Bank Reconciliation:</p> <ul style="list-style-type: none"> a) Perform bank reconciliation for the following scenario: <ul style="list-style-type: none"> i. Bank statement shows a balance of ₹1,20,000, ii. Tally Prime ledger shows a balance of ₹1,35,000. iii. Outstanding cheques total ₹15,000, <p>9. Perform shortcut key for: Create a voucher & Save a voucher.</p> <p>10. Transactions Other Than Purchase and Sales:</p> <ul style="list-style-type: none"> a) Record the following miscellaneous transactions: <ul style="list-style-type: none"> i. Paid insurance premium of 27,000 by cheque. ii. Received interest income of ₹3,000 credited directly to the bank account. <p>11. Exporting Reports:</p> <ul style="list-style-type: none"> a) Export the trial balance prepared in question 3 to MS Excel format. <p>12. Creating GST Invoices:</p> <ul style="list-style-type: none"> a) Create a GST invoice for selling goods worth ₹80,000 to LMN Traders, including 18% GST. <p>13. Perform shortcut key for: View the Group Summary report.</p> <p>14. Stock Management:</p> <ul style="list-style-type: none"> a) Add a new item "Laptop" to the inventory with an opening stock of 10 units. b) Delete the item "Printer" from the inventory. c) Modify the existing item "Chair" to adjust the selling price to ₹500. <p>15. Perform find/search function to find a particular amount or a narration</p> <p>Note: Concerned teacher can add additional experiment as per requirement</p>	
--	---	--

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 marks
Continuous Internal Assessment (CIA): 15 Marks.
End Semester Exam (ESE): 35 marks

Continuous Internal Assessment (CIA):	Internal test/Quiz:-10 & 10 Assignment /seminar-05	Better marks out of the two test/Quiz+ obtained marks in
--	---	---



SHRI DAVARA UNIVERSITY, NAYA RAIPUR (C.G.)

(By Course Teacher)	Total marks: -15	assignment shall be considered against 15 marks.
End Semester Exam (ESE):	Laboratory/field skill performance: on spot Assessment A. Performed the task based on lab work- 20 marks B. Spotting based on tools & technology(written)-10marks C. Viva-voce (based on principle/technology)- 5 marks	