SYLLABUS FOR THE BATCH FROM THE YEAR 2023 TO YEAR 2024

Programme Code: PDCA

Programme Name: P.G. DIPLOMA IN COMPUTER APPLICATIONS

(Semester I-II)

Examinations: 2023-2024

P.G. Department of Computer Science & Applications

Khalsa College, Amritsar

Programme name: P.G. DIPLOMA IN COMPUTER APPLICATIONS
Programme code: PDCA
Programme Duration :1 year

Programme Objectives:

1.	Give students an in-depth understanding of why computers are essential components in business, education and society.
2.	An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
3.	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
4.	An ability to function effectively on teams to accomplish a common goal.
5.	An understanding of professional, ethical, legal, security and social issues and responsibilities.

Programme Specific Outcomes (PSOs):

PSO-1.	To understand and comprehend advanced level of programming, databases, networks concept and management, Web Designing & Uses of Internet and data analysis.
PSO-2.	To demonstrate competence in using computer science concepts and computational tools for simulation and digital transformation.
PSO-3.	To develop ability to effectively apply the information technology concepts to analyze, design and develop cost effective solutions to the societal problems.
PSO-4.	To provide user friendly and need based mobile, web or cloud based solutions to the society.
PSO-5.	To understand and comprehend advanced level of programming, databases, networks concept and management, Web Designing & Uses of Internet and data analysis.

P.G. DIPLOMA IN COMPUTER APPLICATIONS

SEMESTER – I

Sr. No.	Course Code	Course Name	Distribution of The Marks				Lecture per week			Credit Distribution				Page No.
			Theory	Practical	Internal Assessment	Total	L	T	P	L	T	P	Total Credits	
1	PDCA-411(DSC-Major)	PC Computing-I (MS Office) 2010	37	37	13Th. 13 Prac.	100	5	1	6	3	1	2	6	4-5
2	PDCA-412(DSC-Major)	PC Computing-II (Professional DTP)	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	6-7
3	PDCA-413(DSC-Major)	Programming in C	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	8-9
4	PDCA-414(DSC-Major)	Database Management System through Oracle-10g & System Analysis & Design	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	10-11
													Total Credits=24	

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – I
PDCA-411: PC COMPUTING-I (MS Office) 2010
Discipline Specific Course (DSC)

Time: 3 Hrs.

M.M: 100
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

Enable the student to

1.	To be proficient in office automation applications.
2.	Handle the word processing software.
3.	To create reports using MS Access.
4.	Understand that in In Today's commercial world, automation helps the users with a sophisticated set of commands to format, edit, and print text documents.
5.	Use it as valuable and important tools in the creation of applications such as newsletters, brochures, charts, presentation, documents, drawings and graphic images.

UNIT I

MS-Word: Introduction to MS-Office, MS-Access, MS Excel. Parts of window of word (Title bar, menu bar, status bar, ruler) , Creation of new documents, opening document ,insert a document into another document. Page setup, margins, gutters, font properties, Alignment, page breaks, header footer deleting ,moving, replace, editing text in document. Saving a document, spell checker, printing a document. Creating a table, entering and editing, Text in tables. Changing format of table, height width of row or column. Editing, deleting Rows, columns in table. Borders, shading, Templates, wizards, Drawing objects, mail merge

UNIT-II

MS-Power Point: Introduction to Ms power point. Power point elements (templates wizard Views, color schemes ,Exploring power point menu (opening & closing menus, working With dialogues boxes), adding text, adding title, moving text area, resizing text Boxes, adding pictures. Starting a new slide, saving presentation, printing slides .Views (slide View slide sorter, notes view, outline view) .Formatting & enhancing text formatting, Choosing transitions. Creating a graph, displaying slide show, adding multimedia .Slide transitions. Timing slide display, adding movies & sounds. Using a pick look Wizards to change format.

UNIT III

MS-Excel: Introduction to Worksheet/Spreads, Features of excel. Describe the excel Window, different functions on different data in excel, creation of graphs, editing it and formatting, changing chart type to 2d chart or 3d chart, creation of worksheet, adding, deleting, moving the text in worksheet, linking different sheets, sorting the data, querying the data, filtering the data (auto and advance filters), What-if analysis, printing a worksheet.

UNIT-IV

MS-Access: Introduction, Understanding Databases. Creating the tables. entering records in table, deleting table, modifying table fields, linking tables, Queries. Forms, formatting forms, relating a form to tables, Reports(building reports, formatting report. displaying the information of table using reports Adding Graphs to your reports. .

References:
1. PC Computing by R.K. Taxali.
2. PC Software by Rachpal Singh & Gurinder Singh**.**

Course Outcomes:

On Completing the course, the students will be able to:

CO-1.	Use word processors, spreadsheets and presentation software.
CO-2.	Understand and create a database using MS Access.
CO-3.	Describe the features and functions of the categories of application software.
CO-4.	Understand the dynamics of an office environment.
CO-5.	Demonstrate the ability to apply application software in an office environment.

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – I
PDCA-412: PC COMPUTING–II (Professional DTP)
Discipline Specific Course (DSC)

Time: 3 Hrs

M.M: 100
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

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2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

1. Corel Draw and Photoshop are graphics-based applications widely used for logo designing, brochures, pamphlets, product box packs, designing a visiting card, and for various advertisements and editing jpeg and other image formats related to graphic designing.
2. They are much admired owing to their usability.
3. The course is in high demand for those who wish to make their career as Graphics designers.
4. As the Demand for Graphics is increasing day by day in media, print, web etc., there are more prospects for jobs and self-employment. There is a constant demand for creative designers in the domestic industry as we as an industry abroad.

UNIT I

Photoshop 5.5
1. Introduction to Graphics, Vector Graphics & Bitmaps
2. Understanding Image Size & resolution
3. Relation between resolution, File sizes & output
4. Using menu & Palettes.
5. Concept of Path (Segment, Anchor, Curved, Closed, Open, Subpath)

UNIT-II

Photoshop 5.5

1. Photoshop Tools (Pen, Pencil, Brush, History, Air, Eraser, Rubber stamp, Smudge, Dodge, Burn, Sponge), Masks & Histogram.
2. Acquiring &. Importing Images,
3. Concept of Layer Channels & Path, Filters, Rendering Effects, Transformation, Strokes, Image Modes, Canvas & Images.
4. Using navigator & Photoshop plugins.

UNIT-III

Corel Draw-9

1. Concepts of vector graphics.
2. Color palate, Pasteboard, &. Print Page
3. Using ruler unit's etc...

UNIT-IV

Corel Draw-9

1. Corel Tools (Pick, Shape, Knife, Eraser, Zoom, Freehand, Natural Pen, Dimensions, Ellipse, Polygon etc.).
2. Transformations, Trimming, Wielding, Intersection of Objects, Snapping, Using Object Manager.
3. Giving effects, (Envelope, Adding Perspective, Contours, Blending Image.)

References:

1. CorelDraw 10 for Windows by Phyllis Davis and Steve Schwartz.
2. Adobe Photoshop for Beginners 2021: Learn The Amazing Features Of Photoshop By Hector Grant.

Course Outcomes:

On Completing the course, the students will be able to:

CO-1.	Get essential information on CorelDraw Graphics Suite.
CO-2.	Become comfortable with the CorelDraw work area, tools, boards, and fundamental methods and understand the strategies of making and controlling vector (plan) articles, shapes and variety fill.
CO-3.	Work with imaginative text for the making logos, marks and any other one-page print plan material.
CO-4.	Work on Corel Draw, Vector Graphics, Colour Palette and Pasteboard.
CO-5.	Get essential information on CorelDraw Graphics Suite.

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER–I
PDCA-413: PROGRAMMING IN C
Discipline Specific Course (DSC)

Time: 3 Hrs.
M.M: 100
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

1.	To comprehend how C works. To become familiar with the grammar and semantics of the C programming language.
2.	To figure out how to plan C classes for code reuse.
3.	To figure out how to carry out duplicate constructors and class part works. To give complete information on C language. Understudies will figure out how to configure programs essentially.

UNIT I

Fundamentals of C: Introduction of C, Data Types, Operators, their precedence, expressions and their evaluation.
Input / Output Functions: Formatted I/O, Character I/O & String I/O Functions.

UNIT II

Control Structures: Taking decisions using if, if-else, switch constructs and Conditional Operator, Description of break and continue Statements. Performing loops using for, while, do-while Constructs.

Functions: Library Functions v/s User-Defined Functions, Declaring (Prototyping) and defining User-Defined functions, ways of passing parameters to functions, Recursive functions, Storage Classes.

UNIT III

Arrays & String: What are Arrays, Declaring arrays, initializing arrays, processing of arrays, passing arrays arguments to functions. What are Strings? How strings are handled in C? String functions, arrays of string.

Pointers: What is a pointer variable? Declaring pointers, accessing values via pointers, pointer arithmetic, pointer to strings, passing arguments using pointers.

UNIT IV

Structure and Unions. Defining a structure type, declaring variables of structure type, initializing structures. Accessing Structure Elements, Use of assignment Statement for structures, array of structures, nested structures, Unions; Declaring a Union, Accessing elements of a type union.

Managing Data Files: Processing a file, Standard Input/Output, System Level I/O, File updating

References:
1. Yashwant Kanetkar: Let us C, BPB Publications, New Delhi.
2. R.S.Salaria : Application Programming in C, Khanna Book Publishing Co.(P) Ltd., Delhi.

Course Outcomes:

CO-1.	Figure out the basics of C programming.
CO-2.	Understudies will secure information and abilities in programming. In addition, this programming will assist them with making programs and applications in C.
CO-3.	Additionally, by learning the essential programming builds, they can undoubtedly switch over to any another language in future.
CO-4.	Develops a basic understanding of computers, the concept of algorithms and algorithmic thinking.
CO-5.	Develops the ability to analyse a problem and develop an algorithm to solve it.

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – I
PDCA-414: DATABASE MANAGEMENT SYSTEM THROUGH ORACLE-10g
& SYSTEM ANALYSIS & DESIGN
Discipline Specific Course (DSC)

Time: 3 Hrs.   **M.M: 100**

Credits		
L	T	P
3	1	2

Theory Marks: 37

Theory Internal Assessment Marks: 13

Practical Marks: 37

Practical Internal Assessment Marks: 13

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

1.	To evolve an understanding of vital DBMS concepts such as database security, integrity.
2.	To learn the physical and logical database designs, database modeling, relational, hierarchical, and network models
3.	To describe DBMS Architecture & Data Independence.
4.	To learn the different cases involved in the design and implementation of a database system.

UNIT I
Basic Concepts:
An overview of Database Management, (database, database system, why database, data independence). An architecture for a database system (levels of the architecture, mapping, DBA), Introduction to Relational database systems.

UNIT II

Relational Model:
Domain and relations, Relational data integrity
System Analysis and Design:
System development life cycle, System development tools.

UNIT III

ORACLE 10g:
SQI. *PLUS
Introduction to Oracle 10g SQL- DOL, DML, DCL
Join methods & Sub query, Union, Intersection, Minus, Tree Walking
Built in Functions, Views, Security amongst users, Sequences, Indexing, Object Oriented
Features of Oracle 10g

UNIT IV

PL/SQL:
Introduction to PL/SQL Cursors- Implicit & Explicit Procedures, Functions & Packages
Database Triggers

References:
1. Database Systems Concepts by Silberschatz, Korth & Sudarshan
2. An Introduction of Database System by C.J. Date (Addison-Wesley Publishing co.)
3. SQL/PL/SQL. The Programming Language of Oracle by Ivan Bayross (BPB Publications)

Course Outcomes:

The students, after the completion of the course, are expected to:

CO-1.	Illustrate the basic elements of a relational database management system
CO-2.	Develop skill to solve the data models for applicable problems
CO-3.	Develop ability to convert ER diagrams into RDBMS data.
CO-4.	Make database connectivity in programming language

P.G. DIPLOMA IN COMPUTER APPLICATIONS

Semester- II

Sr. No.	Course Code	Course Name	Distribution of The Marks				Lecture per week Tutorial Per Week			Credit Distribution of The Course				Page No.
			Theory	Practical	Internal Assessment	Total	L	T	P	L	T	P	Total Credits	
1	PDCA-421(DSC-Major)	Network Concepts and Management (Hardware, Software, setting in LINUX/UNIX/NT environment	37	37	13Th. 13 Prac.	100	5	1	6	3	1	2	6	13-14
2	PDCA-422(DSC-Major)	Programming in C++	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	15-16
3	PDCA-423(DSC-Major)	Introduction to Scripting Languages, Web Designing & Uses of Internet	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	17-18
4	PDCA-424(DSC-Major)	Programming in Visual Basic with Active X	37	37	13 Th. 13 Prac.	100	5	1	6	3	1	2	6	19-20
													Total Credits=24 Grand Total(I+II)=48	

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – II
PDCA-421: NETWORK CONCEPTS AND MANAGEMENT
(HARDWARE, SOFTWARE, SETTING IN LINUX/UNIX/NT ENVIRONMENT)
Discipline Specific Course (DSC)

Time: 3 Hrs.

M.M: 100
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

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Course Objectives:

1.	Understand that global connectivity can be achieved through computer networks.
2.	Understand the function of networks and get exposure to different existing and upcoming communication technologies.
3.	Make them aware that knowledge about hardware and software requirements of networks is essential.

UNIT I

Introduction:
Network H/W and Software requirement~ Network topologies, OSI reference model,
TCP/IP model.
Design Issues: ISDN, ATM, Routers, hub, switches.

UNIT II

Network security:

Data compression techniques, cryptography, IP addressing schemes.

UNIT III

NT administration:

Account policies, creating a user account, group membership, administration of share through server manager. Primary Domain controller, backup, domain controller.

UNIT IV

Unix:

Network Operating System: Architecture, Shell, Kernel & File System
Introduction to Linux:

Comparative study of NT server, Unix and Linux.

References:

1. Tannenbaum: Computer Network, Prentice Hall, 1992, 3rd.
2. Robert Reinstein, et.al: Windows NT Trouble Shooting and Configuration, Techmedia.

Course Outcomes:

On Completing the course, the students will be able to:

CO-1.	Become familiar with the concept of Network hardware and software requirements.
CO-2.	Understand the working of different protocols at different layers of OSI and TCP/IP models.
CO-3.	Learn the concepts of different networking devices like router, hub, and switch.
CO-4.	Understand the concept of IP address and its various classes.
CO-5.	Compare and understand the different networking operating systems like Windows NT, UNIX and Linux.

Time: 3 Hrs.
M.M: 100
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

The learning objectives of this course are:

1.	To understand how C++ improves C with object-oriented features.
2.	To learn how to design C++ classes for code reuse.
3.	To Anaylse how to implement copy constructors and class member functions.
4.	To understand the concept of data abstraction and encapsulation.
5.	To learn how to overload functions and operators in C++.
6.	To Know how containment and inheritance promote code reuse in C++.
7.	To learn how inheritance and virtual functions implement dynamic binding with polymorphism.

UNIT I

Programming Paradigms: Introduction to the object-oriented approach towards programming by discussing Traditional, Structured Programming methodology.

Object Oriented Programming using C++: Elements of Oops, Characteristics of OOP, Overview of C++, I/O using cout and cin.

UNIT II

Object and Classes: Class Specfication, class objects, Accessing class member.

Constructor &Destructor: Constructor: Definition , Overloading, Types of Constructors. Destructor.

UNIT III

Inheritance: Concept of inheritance, Base & derived classes, Access Specifiers, Class Hierarchies, Types of Inheritance with examples.

Operator Overloading: Overloading unary and binary operators, Type Conversion using Operator Overloading.

UNIT IV

Virtual Functions and Polymorphism: Virtual functions, friend functions, static function, thispointer, polymorphism, Types of Polymorphism with examples.

References:

1. Teach yourself C++, Herbert Schildth, Tata McGraw Hill,1998.
2. Object Oriented Programming in Turbo C++, Robert Lafore, Galgotia Publication,2011
3. The Complete Reference By Herbert Schildt ,Fourth Edition,2002
   .

Course Outcomes:

Upon completion of this course, the students will be able to:

CO-1.	Understand the difference between the top-down and bottom-up approach.
CO-2.	Describe the object-oriented programming approach in connection with C.
CO-3.	Apply the concepts of object-oriented programming.

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – II
PDCA-423: INTRODUCTION TO SCRIPTING LANGUAGES
WEB DESIGNING AND USES OF INTERNET
Discipline Specific Course (DSC)

Time: 3 Hrs.   **M.M: 100**
Theory Marks: 37
Theory Internal Assessment Marks: 13
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Couse Objectives:

1.	To create better understanding of the principles of creating an effective web page and learning of the web language: HTML
2.	Better acquaintance with graphic design principles and learn how to implement these theories into reality.
3.	Better learning of how to plan and conduct user research related to web designing.
4.	Students learn various techniques of Web design, Form Design, Table Design, Front page 2000 and learn how to embed social media content into web pages.
5.	Skills are developed to analyses social sites.

UNIT I

HTML
Structure of HTML, Tags, Character Entities, Hyperlinks, Frames, Tables, Lists, Forms, Limitations of HTML.

UNIT II

Front Page 2000

Features, Creating a Web Site using Wizard, One / Two / Three Column Body, Front Page Window, Various Toolbars of Front Page, Adding Clip Art, Thumbnails, resampling an Image, Beveling & Cropping an Image, Creating Bookmarks, Adding an E-mail Hyperlink, Tables, Marquee, Counter, banner, Hover Buttons, Creating a Web Page Using a Template, Themes, Forms.

UNIT III

Internet & its Use

Types of Internet Connectivity, World Wide Web, E-mail, Telnet, Filer Transfer Protocol, IRC, Virtual Reality, Web Publishing,

UNIT IV

Web Hosting, Cyber Crime, Types of Cyber Crimes, Cookies, Virus, Trojan Horse, Worm, Danger of Virus.

References:

1. Internet Applications and Web Designing by A.P. Publishers.

2. HTML, DHTML, Java Script, Perl, CGI by BPB Publications.

3. Learning to Use Internet by BPB Publications.

Course Outcomes:

On Completing the course, the students will be able to:

CO-1.	Understand the HTML tags.
CO-2.	Learn how to write, test and debug web pages using HTML
CO-3.	Become familiar with graphics.
CO-4.	Develop ability to create and edit web pages using Front Page.
CO-5.	Understand different types of internet connectivity and protocols related to internet

P.G. DIPLOMA IN COMPUTER APPLICATIONS
SEMESTER – II
PDCA-424: PROGRAMMING IN VISUAL BASIC with ACTIVE–X
Discipline Specific Course (DSC)

Time: 3 Hrs.

M.M: 100
Theory Marks: 37
Practical Marks: 37
Practical Internal Assessment Marks: 13

Credits		
L	T	P
3	1	2

Note for paper setter and students:

1. **Medium of Examination is English Language.**
2. **There will be five sections.**
3. **Section A is compulsory and will be of 9 marks consisting of 8 short answer type questions carrying 1.5 mark each covering the whole syllabus. The answer should not exceed 50 words. The students will have to attempt any 6 questions in this section.**
4. **Sections B, C, D and E will be set from units I, II, III & IV respectively and will consist of two questions of 7 marks each from the respective unit. The students are required to attempt one question from each of these sections.**

Course Objectives:

1.	Analyze program requirements.
2.	Design/develop programs with GUI interfaces.
3.	Code programs and develop interface using Visual Basic.Net.
4.	Perform tests, resolve defects, and revise existing code.

UNIT I

Introduction to VB Environment
VB Applications
Controls Menus, Tool Bar and Dialogue Boxes

UNIT II

Testing and Debugging
Working with Files
Data Access Objects (DAO)

UNIT III

Remote Data Objects (RDO)
Active X Data Objects (ADO)
Data Reports
OLE -Control & Automation Server

UNIT IV

Active X -CONTROLS, EXE, DLL, Document, Wizards

Minor Project

References:

1. Visual Basic in easy steps by McGraw Hill.
2. Visual Basic 6 Programming Black Book by Steven Holzner.

Course Outcomes:

On Completing the course, the students will be able to:

CO-1.	Design, formulate, and construct applications with visual basic
CO-2.	Understand the integrated development environment (IDE)
CO-3.	Distinguish between the types of event driven programming.
CO-4.	Write program code using event driven programming