Skill Development 100%

II B.Sc. Information Technology

SEMESTER –IV

For those who joined in 2022 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I4CC7	PROGRAMMING IN JAVA	Lecture	6	4

COURSE DESCRIPTION

This course enable the students to build object oriented java programs using the concept of abstraction, encapsulation, exception handling, packages, interfaces, threads and AWT controls. It also imparts the ability to develop projects in java with JDBC connectivity.

COURSE OBJECTIVES

To acquaint the students with various techniques of Java Programming and help them to create effective programs in this language.

UNITS

UNIT – I :JAVA EVOLUTION & OVERVIEW (17 Hrs)

Java history – Java Features – Java Support system – Java Environment-Simple Java Program – An Application with two classes – Java Program Structure – Java Tokens – Java statements –Installing and configuring Java –Implementing a Java program – Java virtual machine –Command Line Arguments

Constants, variables, and Data types: Introduction-Constants-Variables-Data types –Declaration of variables- Giving values to variables-Scope of variables-symbolic constants-Type casting – Getting values of variables-standard default values.

UNIT –II: BRANCHING, LOOPING & CLASSES (17 HRS.)

Decision Making and Branching: Introduction-Decision Making with if statements- simple if statements- the If Else Statement-Nesting of If Else Statements- The else if Ladder- The switch Statement- The ?: Operator

Decision Making and Looping : Introduction- The while Statement-The do statement- The for Statement- Jumps in Loops- Labeled Loops.

Classes, Objects and Methods: Introduction- Defining a class- Field declaration- method declaration - Creating Objects- Accessing Class Members- Constructors- Methods Overloading- Static Members- Nesting of Methods- Inheritance- Overriding Methods- Final Variables and Methods- Final Classes- Finalizer Methods- Abstract Methods and Classes- Visibility Control.

UNIT –III:ARRAYS , INTERFACE & PACKAGES (17 HRS.)

One dimensional arrays – creating an array – Two dimensional array –Strings – Vectors –Wrapper classes.

Defining Interface – Extending interface – Implementing interface – Accessing interface variables.

Java API Packages – Using system packages – Naming conventions- Creating package- Accessing a package – using a package – Adding class to a package – Hiding classes.

UNIT –IVMULTITHREADING,EXCEPTIONS& APPLETS (17 HRS.)

MULTITHREADING : Life cycle of Thread – Using Thread Methods – Thread Exceptions –Thread Priority –Synchronization – Implementing the'runnable' interface.

EXCEPTIONS : Types of Errors –Exceptions –Syntax of exception handling code – Multiple catch statement –Using finally statements –Throwing our own exceptions .

APPLET: Building Applet code - Applet Life cycle- Creating an Executable Applet – Designing a web page – Applet tag –Adding applet to HTML file – Passing Parameter to Applet – Displaying Numerical Values –Getting Input from the user – Event Handling.

UNIT –V AWT& JDBC (17 HRS.)

AWT : Events-Listeners-Event Handling Methods-Labels-Button Control-Checkbox Control-radio button control-Choice control-List control-Scrollbars-Flow Layout- **Border Layout(Self Study).**

JAVA DATABASE CONNECTIVITY : Establishing a Connection-Creation of Data Tables-Entering Data into the tables _ Table Updating-Use of Prepared Statement- Obtaining Metadata-Using Transaction-Scrollable Result sets-**Stored Procedure (Self Study).**

UNIT –VI DYNAMISM (Evaluation Pattern-CIA only) (5 HRS.)

Latest Trends in Java Technologies (Angular, React)

TEXT BOOK:

1. E. Balagurusamy, " Programming with JAVA",6th Edition, 2019,McGraw Hill Education,
2. Muthu, C. "Programming with JAVA." Vijay Nicole Imprints, Chennai (2004).Chapters: 25, 8, 16, 9, 10, 11, 18, 19

REFERENCES:

1. Horstmann, Cay S., and Gary Cornell.Core Java: Advanced Features.Vol. 2.Pearson Education, 2013.
2. Naughton, Patrick, and Herbert Schildt. "The complete reference java 2." (2003).
3. Arnold, Ken, et al. The Java programming language.Vol. 2. Reading: Addison-wesley, 2000.
4. Schildt, Herbert. "Java: the complete reference." (2017)

WEB REFERNCES :

1. Java Tutorial :
https://www.tutorialspoint.com/java/
2. Java Tutorial For Beginners: Learn in 7 Days
https://www.guru99.com/java-tutorial.html

COURSE CONTENTS & LECTURE SCHEDULE

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids

UNIT – I CLASSES & OBJECTS				
1.1	Class fundamentals, Declaring objects, Assigning object reference variables, introducing methods	5	Chalk & Talk	Black Board
1.2	Constructors, this keyword, finalize() method	4	Chalk & Talk	Black Board
1.3	overloading methods, using object as parameters, Argument passing, returning object, Recursion	4	Lecture	PPT& White board
1.4	Nested &Inner Classes, Inheritance & Polymorphism, Inheritance	3	Lecture	Smart Board
1.5	Method overriding (Self Study)	1	Discussion	Black Board
UNIT – II: PACKAGES, INTERFACE & EXCEPTION HANDLING				
2.1	Packages, Access Protection	4	Chalk & Talk	Black Board
2.2	Importing Packages, Interfaces	5	Chalk & Talk	Black Board
2.3	Exception Handling Function	4	Lecture	PPT& White board
2.4	Exception types, using try & catch	3	Lecture	Smart Board
2.5	Uncaught exception (Self Study)	1	Discussion	Black Board
UNIT – III: MULTITHREADING PROGRAMMING				
3.1	Life cycle of thread, Creating & Running Threads	4	Chalk & Talk	Black Board
3.2	Methods in thread classes, java. Lang, PACKAGES: Type wrapper- The number class	4	Chalk & Talk	Black Board
3.3	The byte, short, integer and Long classes, the float and Double classes	3	Lecture	PPT& White board
3.4	The character class, The Boolean class, the process class, the runtime class	3	Lecture	Smart Board
3.5	The system class, the object class, the math class	2	Lecture	Black Board
3.6	String Buffer class (Self Study)	1	Discussion	Black

				Board
UNIT – IV : ABSTRACT WINDOW TOOLKIT - I				
4.1	Events, Listeners, Event Handling Methods, Labels, Button Control	4	Chalk & Talk	Black Board
4.2	Checkbox Control, radio button control, Choice control, List control, Scrollbars, Flow Layout	4	Chalk & Talk	Black Board
4.3	Border Layout (Self Study)	1	Discussion	Black Board
4.3	ABSTRACT WINDOW TOOLKIT - II :Windows & frames, Menus, Dialogs, Mouse Events and their Listener	2	Lecture	PPT& White board
4.3	Adapter Classes, Inner classes, Anonymous Inner classes	2	Lecture	Smart Board
4.4	SWING: JApplet class, Icons, JLabel Control, JTextfield Control, JButton Control, JCheckbox	2	Chalk & Talk	Black Board
4.5	Control, JRadioButton Control, Menus, JSlider Control, JComboBoxConrol, JgtabbedPane Control, JScrollPane Control	2	Chalk & Talk	Black Board
UNIT – V : JAVA DATABASE CONNECTIVITY				
5.1	JAVA DATABASE CONNECTIVITY: Establishing a Connection, Creation of Data Tables	4	Chalk & Talk	Black Board
5.2	Entering Data into the tables, Table Updating-Use of Prepared Statement	3	Chalk & Talk	Black Board
5.3	Obtaining Metadata, Using Transaction, Scrollable Result sets	3	Lecture	PPT& White board
5.4	Stored Procedure (Self Study)	1	Discussion	Black Board
5.5	SERVLETS: Servlet and Dynamic Web pages, Life cycle of a servlet, A simple servlet	4	Lecture	Smart Board
UNIT –6 DYNAMISM				
6.1	Latest Trends in Java Technologies - Angular	2	Discussion	Black Board
6.2	Latest Trends in Java Technologies - React	3	Discussion	Black Board

INTERNAL - UG

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

End Semester - UG

Levels	Section A (i) 5 Mks.	Section A (ii) 5 Mks	Section B 8 Mks.	Section C 12 Mks	Section D 20 Mks.	Section E 10 Mks.	Total 60Mks.	
K1	5	5	-	4	-	-	14	23.33 %
K2	-	-	8	4	-	-	12	20 %
K3	-	-	-	-	20	-	20	33.33 %
K4	-	-	-	4	-	10	14	23.34 %
Total	5	5	8	12	20	10	60	100 %

CIA	
Scholastic	**35**
Non Scholastic	**5**
	40

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	**C2**	**C3**	**C4**	**C5**	**C6**	**CIA**	**ESE**	**Total**
10	**10**	**5**	**5**	**5**	**5**	**40**	**60**	**100**

UG CIA Components

			Nos		
C1	-	Test (CIA 1)	1	-	10 Mks
C2	-	Test (CIA 2)	1	-	10 Mks
C3	-	Assignment	1	-	5 Mks
C4	-	Open Book Test/PPT	2 *	-	5 Mks
C5	-	Quiz	2 *	-	5 Mks
C6	-	Attendance		-	5 Mks

**** The best out of two will be taken into account***

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Understand the concepts of Object-Oriented Programming & Java Programming Constructs.	K1 & K2	PSO1& PSO2
CO 2	Understand basic concepts of Java such as operators, classes, objects, inheritance, packages, Enumeration and various keywords.	K1 & K2	PSO1, PSO2 &PSO3
CO 3	Understand the concept of exception handling and Input/output operations.	K1 & K2	PSO1& PSO2
CO 4	Design Java & Java applet based applications.	K2 & K3	PSO6
CO 5	Analyze & Design the concept of Event Handling and Abstract Window Toolkit.	K3 & K4	PSO3 &PSO8

Mapping of C0s with PSOs

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	3	2	2	2	1	1	1
CO2	2	3	2	2	2	2	2	1
CO3	2	2	2	3	2	2	2	2
CO4	2	2	3	2	2	2	2	2
CO5	2	2	2	2	2	3	1	1

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:

1. **Staff Name: V.MAGESHWARI**

Forwarded By

V. Mageshwari

HOD'S Signature

& Name

Skill Development 100%

III B.Sc. Information Technology

SEMESTER – V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I5CC9	.NET PROGRAMMING	Lecture	5	5

COURSE DESCRIPTION

This course introduces .NET Framework and imparts various concepts in .NET framework.

COURSE OBJECTIVES

To facilitate the students to understand, the features of .NET framework and use the design of the language to develop robust software.

UNITS

UNIT –I INTRODUCTION (14HRS.)

.NET Framework - Development Environment: Console, Windows – Variables and expressions - Flow Control - Functions - Debugging and Error Handling -Classes - Collections, Comparisons and Conversions – Generics.

UNIT –II WINDOWS PROGRAMMING (14 HRS.)

Controls(Button, Label , Link Label, Radio Button, Check Box, Text Box, Rich Text Box, List Box, Checked List Box, List View, Tabbed), Forms (Menus and Tool Bars, SDI and MDI applications, Building MDI applications.

UNIT –III WEB PROGRAMMING (14 HRS.)

ASP.NET Web Pages - Server Controls - ASP.NET server controls: Types of control, ASP.NET state management engine. Web.config and global.asax

files. - Input Validation - State Management - Master Pages - Navigation

UNIT –IV ASP.NET& ADO.NET (14HRS.)

Data Controls - Data Bound Controls - XML - LINQ - LINQ with Databases - ADO.NET architecture- ASP.NET data control - Data source control. Crystal reports. LINQ: Operators, implementations, LINQ to objects, XML, ADO.NET

UNIT –V ADVANCED CONCEPTS (14 HRS.)

ASP.NET Security: Authentication, Authorization, Impersonation, ASP.NET provider model -WPF - WCF – WWF

UNIT –VI DYNAMISM (Evaluation Pattern-CIA only) (5 HRS.)

JQuery- AJAX

TEXT BOOK:

1. Beginning Visual C# 2010, K. Watson, C. Nagel, J.H Padderson, J.D. Reid, M.Skinner, Wrox (Wiley) 2010. (Unit I and II).

REFERENCES:

1. Bruce Barstow, Tony Martin, “Visual Basic. NET in 60 Minutes a Day Bible”, Willey Dreamtech India (P) Ltd., 1st Edition, 2003.
2. Visual Basic .Net Programming Black Book by STEVEN HOLZNER, Dreamtech Press
3. Dean Alan Hume, “Fast ASP.NET Websites”, Manning Publications Co, 2013.

Digital Open Educational Resources (DOER):

1. Asp and Asp.net Tutorials

https://www.w3schools.com/asp/default.ASP

2. Asp.net Tutorial

https://www.tutorialspoint.com/asp.net/index.htm

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1INTRODUCTION				
1.1	The Origin of .Net Technology	1	Discussion	Black Board
1.2	Common Language -Runtime (CLR)	2	Chalk & Talk	Black Board
1.3	Common Type System (CTS)	2	Lecture	LCD
1.4	Common Language Specification(CLS)	2	Discussion	Google classroom
1.5	Garbage Collector	3	Chalk & Talk	Black Board
1.6	Memory Management	2	Chalk & Talk	Black Board
1.7	Visual studio .NET (Self Study).	2	Discussion	Google classroom
UNIT -2 C#				
2.1	Building Blocks of C#	1	Lecture	PPT & White board
2.2	Type Conversion	1	Chalk & Talk	Green Board
2.3	Functions	2	Chalk & Talk	Black Board
2.4	Delegates - Error Handling	2	Chalk & Talk	Black Board
2.5	Exception Handling – Classes in c#	2	Chalk & Talk	Black Board
2.6	Access modifiers	2	Chalk & Talk	Black Board
2.7	Interface – Collections	2	Lecture	Google classroom
2.8	Generics	1	Chalk & Talk	Black Board
2.9	As Operator (Self Study)	1	Discussion	Google classroom
UNIT – 3 Window Programming and Data Access				
3.1	Controls	2	Chalk & Talk	Green Board
3.2	Common Controls (Self Study)	1	Discussion	Google classroom
3.3	Container controls –	2	Chalk &	Black

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
	Menus and Toolbars –		Talk	Board
3.4	Deployment	1	Chalk & Talk	Black Board
3.5	File System	2	Discussion	Black Board
3.6	XML	1	Lecture	PPT & White board
3.7	Databases and ADO.NET	1	Lecture	Black Board
3.8	ADO.NET classes	2	Chalk & Talk	Black Board
3.9	Data Binding	2	Chalk & Talk	Black Board
UNIT – 4 ASP.NET				
4.1	Features	2	Discussion	PPT & White board
4.2	Life Cycle (Self Study)	1	Chalk & Talk	Green Board
4.3	Server Controls – Control Structure	2	Chalk & Talk	Black Board
4.4	Functions – HTML Events – ASP.NET web control events	2	Chalk & Talk	Black Board
4.5	Event driven Programming – Postback - Reading from databases	3	Discussion	Black Board
4.6	HTML Server control - Web Server controls	2	Lecture	Green Board
4.7	Validation Controls	2	Discussion	Black Board
UNIT – 5 DOT NET ASSEMBLIES				
5.1	State Management	2	Lecture	PPT & White board
5.2	View State (Self Study)	1	Discussion	PPT & White board
5.3	Control State	2	Lecture	Black Board
5.4	Hidden Field	2	Chalk & Talk	Black Board
5.5	Session	2	Chalk &	Black

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
			Talk	Board
5.6	Cookies	2	Chalk & Talk	Black Board
5.7	Session Events	1	Chalk & Talk	Black Board
5.8	Web Services	1	Chalk & Talk	Black Board
5.9	XML – SOAP	2	Chalk & Talk	Black Board
5.10	Building ASP.NET Web Services	2	Chalk & Talk	Black Board
UNIT –6 DYNAMISM				
6.1	MVC Framework	2	Discussion	Black Board
6.2	WPF, AJAX	3	Discussion	Black Board

INTERNAL - UG

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	**2**	**2**	**-**	**-**	**-**	**4**	-	**4**	10 %
K2	**2**	**2**	**5**	**-**	**-**	**9**	-	**9**	22.5 %
K3	**3**	**3**	**-**	**-**	**5**	**11**	-	**11**	27.5 %
K4	**3**	**3**	**-**	**5**	**-**	**11**	-	**11**	27.5 %
Non Scholastic	**-**	**-**	**-**	**-**	-		**5**	**5**	12.5 %
Total	**10**	**10**	**5**	**5**	**5**	**35**	**5**	**40**	**100 %**

End Semester - UG

Levels	Section A (i) 5 Mks.	Section A (ii) 5 Mks	Section B 8 Mks.	Section C 12 Mks	Section D 20 Mks.	Section E 10 Mks.	Total 60Mks.	
K1	5	5	-	4	-	-	14	23.33 %
K2	-	-	8	4	-	-	12	20 %
K3	-	-	-	-	20	-	20	33.33 %
K4	-	-	-	4	-	10	14	23.34 %
Total	5	5	8	12	20	10	60	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

UG CIA Components

			Nos		
C1	-	Test (CIA 1)	1	-	10 Mks
C2	-	Test (CIA 2)	1	-	10 Mks
C3	-	Assignment	1	-	5 Mks
C4	-	Open Book Test/PPT	2 *	-	5 Mks
C5	-	Quiz	2 *	-	5 Mks

C6 - Attendance - 5 Mks

**** The best out of two will be taken into account***

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Explain the .NET framework	K1, K2	PSO1
CO 2	Apply the general programming structure of vb.net in developing software solutions based on user requirements.	K2 & K3	PSO1 &PSO2
CO 3	Design basic GUI applications using .NET.	K2 & K3	PSO3& PSO5
CO 4	Demonstrate advanced features of .NET programming.	K2 & K3	PSO2 &PSO3
CO 5	Develop windows application and web applications in .NET framework analyzing user requirements.	K3& K4	PSO5, PSO7 & PSO8

Mapping of COs with PSOs

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	3	2	2	2	1	1	1
CO2	2	3	2	2	2	2	2	1
CO3	2	2	2	3	2	2	2	2
CO4	2	2	3	2	2	2	2	2
CO5	2	2	2	2	2	3	1	1

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:

1. **Staff Name: MRS. V. JANE VARAMANI SULEKHA**

Forwarded By

V. Mageshwari

HOD'S Signature
& Name

III B.Sc. Information Technology

SEMESTER – VI

For those who joined in 2021 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I6CC13	PYTHON PROGRAMMING	Lecture	5	5

COURSE DESCRIPTION

This course is designed to introduce the python programming language. The focus of the course is to provide students with an introduction to programming, utilities, multitasking, GUI and network applications.

COURSE OBJECTIVES

To acquire Object Oriented Skills and programming skills in core Python.

UNITS

UNIT –I BASICS OF PYTHON PROGRAMMING. (15HRS.)

Features of Python-History of Python-The Future of Python-Literal Constant-Variables and Identifiers-Data Types-Operators and Expression-Operations on Strings-other Data types.

UNIT –II DECISION CONTROL STATEMENTS (15 HRS.)

Introduction to Decision Control Statements-Selection /Conditional Branching Statements-Basic Loop Structures/Iterative Statements-Nested Loops-The Break statement-The Continue statement-The Pass statement-The else statement used with Loops.

UNIT –III FUNCTIONS AND MODULES: (15 HRS.)

Need for Functions-Function declaration and definition -Function call-Variable Scope and Lifetime-The return statement-More on Defining

Functions-Lambda Functions or Anonymous Functions-Documentation Strings-Recursive Functions-Modules-Packages in python-Standard Library Modules-Globals(),Locals(),Reload()-Function Redefinition.

UNIT –IV PYTHON STRING REVISITED (15 HRS.)

Concatenating,Appending and Multiplying Strings-Strings are Immutable-String Formatting Operators-Built -in String Methods and Functions- Slice Operation-ord() and chr() functions-in and not in operator-Comparing Strings-Iterating String.

UNIT –V FILE HANDLING & DATA STRUCTURES (15 HRS.)

File path-Types of files-Opening and Closing Files-Reading and Writing Files-File Positions-Renaming and Deleting Files-Lists-Dictionaries.

UNIT –VI DYNAMISM (Evaluation Pattern-CIA only) (5 HRS.)

Advanced Concepts of Python (Machine Learning in Python, Data Processing using Python).

TEXT BOOK:

1. **" Python Programming Using Problem Solving Approach"-** ReemaThareja.- Oxford University Press.

REFERENCES:

1. Zelle, John M. Python programming: an introduction to computer science. Franklin, Beedle& Associates, Inc., 2004.
2. Jeeva Jose, SojanLal, P, Introduction to Computing & Problem Solving with Python.
3. Kulkarani, PROBLEM SOLVING AND PYTHON PROGRAMMING, Published by Yes Dee Publishing Pvt Ltd., Edition 2017

OPEN EDUCATIONAL RESOURCES :

1. Python Tutorial

https://www.tutorialspoint.com/python/

2. https://www.w3schools.com/python/python_reference.asp

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT - IINTRODUCTION TO PYTHON PROGRAMMING				
1.1	Problem Solving, Definition of a program, Software Bug, Programming Errors. Algorithms	3	Chalk & Talk	Black Board
1.2	Definition of Algorithm, Characteristics of Algorithm	3	Chalk & Talk	Black Board
1.3	Flowcharts, System Configuration (Self Study)	2	Discussion	Black Board
1.4	Downloading Python, Testing python working properly, Installation of Python on Linux	3	Lecture	Smart Board
1.5	Structure of Python, Keywords, variable, comments, data types, Literals, Constants, Operators, Operator Precedence.	3	Lecture	Black Board
UNIT – II: PYTHON I/P & O/P STATEMENT				
2.1	Input statement in Python, Output statement in Python	3	Chalk & Talk	Black Board
2.2	Python String Formatting Options, Python Math Library.	4	Chalk & Talk	Black Board
2.3	Decision Making, if statement	3	Lecture	PPT& White board
2.4	if- else statement (Self Study)	1	Lecture	Smart Board
2.5	if- else if, else Repetition Statement, for loop	3	Lecture	Black Board
UNIT – IIIUSER – DEFINED FUNCTION				
3.1	Syntax of user defined function, Return statements, Function Arguments in Python	2	Chalk &Talk	Black Board
3.2	Default Parameter, call- by - value vs Call – by – reference in Python	2	Chalk & Talk	Black Board
3.3	Nested function in Python, Closure Function Python	2	Lecture	PPT& White board

3.4	Anonymous Function in Python (Self Study)	1	Lecture	Smart Board
3.5	Function Composition in Python, Recursive Function in Python	1	Lecture	Black Board
3.6	Strings in Python, Reading Strings from Keyboard, Accessing Strings	1	Discussion	Google classroom
3.7	Modifying String in Python, String Concatenation, String updating	2	Chalk & Talk	Green Board
3.8	Iterating through a string, String Membership Operations	2	Discussion	Black Board
3.9	Built – in String Function, Escape Sequence in Python	1	Chalk & Talk	Black Board
UNIT – IV PYTHON LIST				
4.1	Read a List Type from a keyboard, Accessing Elements of a List	2	Chalk & Talk	Black Board
4.2	Modifying Elements of a List, Basic List Operation	2	Chalk & Talk	Black Board
4.3	Built in function, List function, List Duplication and comparison of Two Lists	2	Lecture	PPT& White board
4.4	Accessing Elements of a Tuple	2	Lecture	Smart Board
4.5	Modifying Elements of a Tuple	2	Lecture	Black Board
4.6	Deleting Elements of a Tuple	3	Discussion	Google classroom
4.7	Basic Tuple Operation, Tuple Built-in Functions (Self Study)	1	Discussion	Black Board
UNIT – V PYTHON DICTIONARY				
5.1	Creating a Dictionary and Printing a Dictionary	3	Chalk & Talk	Black Board
5.2	Accessing Dictionary Elements, Modifying a Dictionary, Delete Operations on Dictionary	2	Chalk & Talk	Black Board
5.3	Writing into Files, Reading from Files	2	Lecture	PPT& White board
5.4	Reading Lines from Files (Self Study)	1	Discussion	Black Board
5.5	Stripping Characters from Files, Filename and Paths, Format operator	2	Lecture	Black Board

5.6	Command Line Arguments, Exception in Python, Python Modules, Python Packages	2	Discussion	Google classroom
5.7	Dictionary Key properties, Comparing Two Dictionaries, Python Dictionary Built in functions	2	Chalk & Talk	Green Board
UNIT –6 DYNAMISM				
6.1	Machine Learning in Python	2	Discussion	Black Board
6.2	Data Processing using Python	3	Discussion	Black Board

INTERNAL - UG

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	**2**	**2**	**-**	**-**	**-**	**4**	-	**4**	10 %
K2	**2**	**2**	**5**	**-**	**-**	**9**	-	**9**	22.5 %
K3	**3**	**3**	**-**	**-**	**5**	**11**	-	**11**	27.5 %
K4	**3**	**3**	**-**	**5**	**-**	**11**	-	**11**	27.5 %
Non Scholastic	**-**	**-**	**-**	**-**	-		**5**	**5**	12.5 %
Total	**10**	**10**	**5**	**5**	**5**	**35**	**5**	**40**	**100 %**

End Semester - UG

Levels	Section A (i) 5 Mks.	Section A (ii) 5 Mks	Section B 8 Mks.	Section C 12 Mks	Section D 20 Mks.	Section E 10 Mks.	Total 60Mks.	
K1	**5**	**5**	**-**	**4**	**-**	-	**14**	23.33 %
K2	**-**	**-**	**8**	**4**	**-**	-	**12**	20 %

K3	**-**	**-**	**-**	**-**	**20**	-	**20**	33.33 %
K4	**-**	**-**	**-**	**4**	**-**	10	**14**	23.34 %
Total	**5**	**5**	**8**	**12**	**20**	**10**	**60**	**100 %**

CIA	
Scholastic	**35**
Non Scholastic	**5**
	40

EVALUATION PATTERN

SCHOLASTIC					**NON - SCHOLASTIC**	**MARKS**		
C1	**C2**	**C3**	**C4**	**C5**	**C6**	**CIA**	**ESE**	**Total**
10	**10**	**5**	**5**	**5**	**5**	**40**	**60**	**100**

UG CIA Components

			Nos		
C1	-	Test (CIA 1)	1	-	10 Mks
C2	-	Test (CIA 2)	1	-	10 Mks
C3	-	Assignment	1	-	5 Mks
C4	-	Open Book Test/PPT	2 *	-	5 Mks
C5	-	Quiz	2 *	-	5 Mks
C6	-	Attendance		-	5 Mks

**** The best out of two will be taken into account***

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the basic concepts of python program.	K1& K2	PSO1& PSO2
CO 2	Apply the Input and output statements in python.	K2 & K3	PSO1& PSO2
CO 3	Analyze the usage of function control structure.	K3 & K4	PSO3
CO 4	Describe String, List and Tuples.	K2 & K3	PSO3& PSO6
CO 5	Create Python Dictionary and Files.	K2, K3& K4	PSO7 & PSO8

Mapping of C0s with PSOs

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	3	2	2	2	1	1	1
CO2	2	3	2	2	2	2	2	1
CO3	2	2	2	3	2	2	2	2
CO4	2	2	3	2	2	2	2	2
CO5	2	2	2	2	2	3	1	1

Mapping of C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1

CO5	**1**	**1**	**1**	**1**

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:

1. **Staff Name: MRS. T. LEENA PREMA KUMARI**

Forwarded By

V. Mageshwari

HOD'S Signature

& Name

Entrepreneurship 100%

I B.Sc. Information Technology

SEMESTER –I

For those who joined in 2021 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I1NME	IMAGE EDITING TOOL	Practical	2	2

COURSE DESCRIPTION

This course content is enables other disciplined students to strengthen and increase the understanding of basis Multimedia application software like Photoshop and Corel Draw.

COURSE OBJECTIVES

To impart, practical knowledge on various editing techniques in Photoshop and Corel draw.

UNITS

UNIT –I BASICS OF CORELDRAW (6HRS.)

Introduction-Getting Started-Creating A New File - Title Bar-Menu Bar- Tool Bar – Work Area-Views. TEXT Introduction-Text Tool-Converting Text-Formatting Text- Webdings Changing the Alignment-Applying Effects

UNIT –II IMAGE& LAYOUT (6 HRS.)

Bitmap Images-Vector Image-Resizing-Rotating-Skewing-Moving-Cropping-Importing Images-Adding Special Effects-Converting to Bitmap-Exporting Images.PAGE LAYOUT: Changing the Page Size-Changing the Layout-Changing the Background.

UNIT –III PHOTOSHOP : SELECTION AND PAINTING TOOLS (6 HRS.)

Marquee Tool-Crop Tool-Lasso Tool-Move Tool, Rubber/clone Stamp tool-Eraser Tool-Paint Brush Tool-Art History/History Brush Tool-Text Tool.

UNIT –IV TRANSFORMATIONS (6 HRS.)

Resizing: Resizing an image- Resizing a canvas- Resizing a selection Rotating: Rotate 180 degrees and 90 degrees clockwise or counter clockwise- Rotate by degrees- Rotate a selection.

UNIT –V FILTERS (6 HRS.)

Sharpen Filters: Sharpen, Sharpen more, Blur Filters: Blur, Blur-more,Distort Filters: Pinch(Squeezing, bulging), Pixellate Filters: crystallize, Extracting an part of image from background image.

LAB EXERCISE

1. Drawing Basic Shapes
2. Text Effect
3. Effects
4. Image Editing
5. Layout and Page Size Change
6. Tools
7. Resizing Image
8. Rotating Image
9. Filters

REFERENCES:

1. Kumar Bittu, “Adobe Photoshop”, ISBN: 978-9350570166, V&S Publishers.
2. Photoshop 7 Complete reference , ISBN 978-0072223118 - Greenberg – McGraw Hill Publications.

OPEN EDUCATIONAL RESOURCES:

1. Photoshop Online Training https://www.tutorialspoint.com/photoshop_online_training/index.asp
2. https://www.entheosweb.com/tutorials/coreldraw/liquid_lext/default.asp

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 BASICS OF CORELDRAW				
1.1	Creating A New File, Title Bar, Menu Bar, Tool Bar	2	Demonstration	Desktop PC
1.2	Work Area Views, Text Introduction, Text Tool Converting Text & Formatting Text	1	Demonstration	Desktop PC
1.3	Changing the Font Size Decorating the Text	2	Demonstration	Desktop PC
1.4	Changing the Alignment-Applying Effects	1	Demonstration	Desktop PC
UNIT -2 IMAGE & LAYOUT				
2.1	Bitmap Images, Vector Image, Resizing, Rotating, Skewing Moving, Cropping	2	Demonstration	Desktop PC
2.2	Importing Images, Adding Special Effects, Converting to Bitmap, Exporting Images.	1	Demonstration	Desktop PC
2.3	Page Layout, Changing the Page Size, Changing the Layout, Applying Styles	2	Demonstration	Desktop PC
2.4	Applying Bitmaps to the Background, Changing the Background,	1	Demonstration	Desktop PC
UNIT -3 PHOTOSHOP : SELECTION AND PAINTING TOOLS				
3.1	Marquee Tool, Crop Tool, Lasso Tool, Move Tool	2	Demonstration	Desktop PC
3.2	Rubber/clone Stamp tool, Eraser Tool, Paint Brush Tool	2	Demonstration	Desktop PC
3.3	Art History Tool, History Brush Tool, Text Tool.	2	Demonstration	Desktop PC
UNIT -4 TRANSFORMATIONS				
4.1	Resizing an image, Resizing a Canvas	2	Demonstration	Desktop PC
4.2	Resizing a selection Rotating, Rotate 180 degrees and 90 Degrees	2	Demonstration	Desktop PC
4.3	Clockwise or counter clockwise, Rotate by degrees-Rotate a selection.	2	Demonstration	Desktop PC
UNIT -5 FILTERS				

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
5.1	Sharpen Filters, Blur Filters Distort Filters	2	Demonstration	Desktop PC
5.2	Pinch(Squeezing, bulging), Pixelate Filters	2	Demonstration	Desktop PC
5.3	Extracting a part of image from background image.	2	Demonstration	Desktop PC

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Construct simple vector graphics using basic drawing elements and shape commands.	K2, K3	PSO1& PSO2
CO 2	Apply basic shape commands and image effects in processing raster format pictures	K2, K3	PSO1, PSO2 & PSO3
CO 3	Understand the basic tools for editing images.	K2, K3	PSO1& PSO2
CO 4	Develop effective graphics for both web and print media.	K2, K3	PSO1, PSO2 & PSO3
CO 5	Apply layer features and layer management techniques for creating Web pages and Invitations.	K2, K3	PSO1, PSO2 & PSO3

CIA	
Scholastic	**35**
Non Scholastic	**5**
	40

EVALUATION PATTERN

SCHOLASTIC		NON - SCHOLASTIC	MARKS		
C1	**C2**	**C3**	**CIA**	**ESE**	**Total**
20	**15**	**5**	**40**	**60**	**100**

C1 – Average of Two Model Test Marks

C2 - Average of Program Completion and Record Work

C3 - Non-Scholastic

Mapping of C0s with PSOs

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	3	2	2	2	1	1	1
CO2	3	3	3	2	2	2	2	1
CO3	3	3	1	2	2	3	2	2
CO4	3	3	3	1	2	2	2	2
CO5	3	3	3	1	1	3	1	1

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:

1. **Staff Name: MRS. T. CHARANYA NAGAMMAL**

Forwarded By

V. Mageshwari

HOD'S Signature

& Name

Employability 100%

II B.Sc. Information Technology

SEMESTER –III

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I3SB1	SKILLL BASED – Automation Skills	Practical	2	2

COURSE DESCRIPTION

This course trains students how to use MS Office applications use in office work such as creating professional-quality documents, store, organize and analyze information, arithmetic operations, functions and create dynamic slide presentations with animation, narration, images, and much more, digitally and effectively.

COURSE OBJECTIVES

To impart knowledge on various concepts in MS Word, Excel, PowerPoint & Publisher.

UNITS

UNIT –I WORD (6 HRS.)

Windows Basics – Introduction to word – Editing a document - Move and Copy text - Formatting text & Paragraph – Enhancing document – Columns, Tables and Other features.

UNIT –II EXCEL (6 HRS.)

Introduction to worksheet – getting started with Excel – Editing cell & using Commands and functions – Moving & Copying , Inserting & Deleting Rows & Columns - Printing work sheet.

UNIT –III ADVANCED FEATURES IN EXCEL (6 HRS.)

Creating charts – Naming ranges and using statistical, math and financial functions, in a worksheet – Additional formatting commands and toolbar – other commands & functions.

UNIT –IV POWERPOINT (6 HRS.)

Overview of Power point – presenting shows for corporate and commercial using Power point

UNIT –V ADVANCED FEATURES OF POWER POINT (6 HRS.)

Formatting text and objects to customize the look of publication- Add, Resize, Rotate, and Group objects- Creation of Product Catalogue- Create bookmarks and hyperlinks.

PROGRAM LIST

MS-WORD

1. **Text Manipulation:**Writinga paragraph about the institution and Change the font size and type, Spell check, Aligning and justification of Text
2. **Bio data:** Preparing Bio-data.
3. **Find and Replace:**Writinga paragraph about individual and do the following. Find and Replace, Use Numbering Bullets, Footer and Headers.
4. **Tables and manipulation:** Creation, Insertion, Deletion (Columns and Rows). Create a mark sheet.
5. **Mail Merge:** Prepare an invitation to invite friends for birthday party. Prepare at leastfive letters.

MS-EXCEL

1. Data sorting-Ascending and Descending (both numbers and alphabets)
2. Mark list preparation for a student
3. Individual Pay Bill preparation.
4. Invoice Report preparation.
5. Drawing Graphs. Take your own table.

MS-POWERPOINT

1. Create a slide show presentation for a seminar.
2. Preparation of Organization Charts
3. Create a slide show presentation to display percentage of marks in each semester for all students
4. Use bar chart(X-axis: Semester, Y-axis: % marks).
5. Use different presentation template different transition effect for each slide.

REFERENCES:

1. Holden, Greg. Microsoft Office 2007 in Simple Steps. Prentice Hall Press, 2009.

Digital Open Educational Resources (DOER):

1. Free Microsoft Office Tutorials At Gcfglobal

https://edu.gcfglobal.org/en/subjects/office/

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 WORD				
1.1	Windows Basics, Introduction to word, Editing a document, Move and Copy text	1	Demonstration	Desktop PC
1.2	Formatting text & Paragraph	1	Demonstration	Desktop PC
1.3	Enhancing document, Columns	2	Demonstration	Desktop PC
1.4	Tables and Other features.	2	Demonstration	Desktop PC
UNIT-2 EXCEL				
2.1	Introduction to worksheet, getting started with Excel	1	Demonstration	Desktop PC
2.2	Printing work sheet	2	Demonstration	Desktop PC
2.3	Editing cell & using Commands and functions	1	Demonstration	Desktop PC
2.4	Moving & Copying, Inserting & Deleting Rows & Columns	2	Demonstration	Desktop PC
UNIT-3 ADVANCED FEATURES IN EXCEL				
3.1	Creating charts	1	Demonstration	Desktop PC
3.2	Naming ranges and using statistical function	1	Demonstration	Desktop PC
3.3	Math and financial function in a worksheet	1	Demonstration	Desktop PC
3.4	Additional formatting commands and toolbar	1	Demonstration	Desktop PC
3.5	Other commands & functions	2	Demonstration	Desktop PC
UNIT-4 POWERPOINT				
4.1	Overview of Power point	2	Demonstration	Desktop PC
4.2	Commercial Presentation using Power point	1	Demonstration	Desktop PC

4.3	Presentation shows for corporate	3	Demonstration	Desktop PC
UNIT -5 ADVANCED FEATURES OF POWER POINT				
5.1	Formatting text and objects to customize the look of publication	1	Demonstration	Desktop PC
5.2	Add, Resize, Rotate, and Group objects	2	Demonstration	Desktop PC
5.3	Creation of Product Catalogue	1	Demonstration	Desktop PC
5.4	Create bookmarks and hyperlinks.	2	Demonstration	Desktop PC

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Use Word to prepare organizational documents.	K2, K3	PSO1, PSO2& PSO3
CO 2	Design financial & other business applications requiring mathematical calculations using spread sheet software.	K2, K3	PSO1, PSO2& PSO3
CO 3	Develop various charts--pie, bar, line, column, & area using spread sheet software.	K2, K3	PSO1, PSO2& PSO3
CO 4	Create Dynamic presentations with animation.	K2, K3	PSO1, PSO2& PSO3
CO 5	Demonstrate presentations with narration and images.	K3, K4	PSO1, PSO2, PSO3 & PSO7

CIA	
Scholastic	**35**
Non Scholastic	**5**
	40

EVALUATION PATTERN

SCHOLASTIC		NON - SCHOLASTIC	MARKS		
C1	C2	C3	CIA	ESE	Total
20	15	5	40	60	100

C1 – Average of Two Model Test Marks

C2 - Average of Program Completion and Record Work

C3 - Non-Scholastic

Mapping of COs with PSOs

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	3	3	2	2	2	1	1	1
CO2	2	3	2	2	2	2	2	1
CO3	2	2	3	2	2	2	2	2
CO4	2	2	3	2	2	2	2	2
CO5	2	2	2	2	2	3	1	1

Mapping of C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:
Staff Name: MRS. V. MAGESHWARI

V. Mageshwari

HOD'S Signature & Name

Employability 100%

III B.Sc. Information Technology

SEMESTER – V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
USIT	22I5SB4	SKILL BASED - IMAGE MANIPULATION TOOLS	Practical	2	2

COURSE DESCRIPTION

This course introduces the concepts and tools for design, create and manipulate images for integration in publication layout and web output by using the software tool.

COURSE OBJECTIVES

To introduce the concept of Vector based Drawing image editing techniques in Photoshop.

UNITS

UNIT –I BASICS OF CORELDRAW (6 HRS.)

Introduction-Getting Started-Creating A New File - Title Bar-Menu Bar- Tool Bar – Work Area-Views. TEXT Introduction-Text Tool-Converting Text-Formatting Text-Changing the Font Size-Decorating the Text-Webdings-Changing the Alignment-Applying Effects

UNIT –II IMAGE& LAYOUT (6 HRS.)

Bitmap Images-Vector Image-Resizing-Rotating-Skewing-Moving-Cropping-Importing Images-Adding Special Effects-Converting to Bitmap-Exporting Images. PAGE LAYOUT: Changing the Page Size-Changing the Layout-Applying Styles-Applying Bitmaps to the Background - Changing the

Background-Adding a Page Frame-Moving Between Pages.

UNIT –III INTRODUCTION TO ADOBE PHOTOSHOP(6 HRS.)

Getting Started With Photoshop: About Photoshop- Exploring the Toolbox - The New CS4 Applications Bar & the Options Bar -Exploring Panels & Menus - Creating & Viewing a New Document - Customizing the Interface - Setting Preferences - Navigating Photoshop - Menus and panels -Opening new files Opening existing files.

UNIT –IV GETTING STARTED WITH LAYERS (6 HRS.)

Understanding the Background Layer- Creating, Selecting, Linking &Deleting Layers- Locking & Merging Layers- Copying Layers, Using Perspective & Layer Styles- Filling & Grouping Layers- Introduction to Blending Modes- Blending Modes, Opacity & Fill- Creating & Modifying Text

UNIT –V PHOTO RETOUCHING (6 HRS.)

The Red Eye Tool- The Clone Stamp Tool- The Patch Tool & the Healing Brush Tool - The Spot Healing Brush Tool- The Color Replacement Tool- The Toning & Focus Tools - Painting with History.

PROGRAM LIST

1. Program to create text clipping effects
2. Program for Cropping using different techniques
3. Program to change background for the image
4. Program for Creation of Wedding Invitation
5. Program for Creation of Book Front page
6. Program for Creation of Image Web gallery
7. Program for Creation of Brochure
8. Program for Visiting card creation
9. Program for how to remove redeye & hotspot in the image
10. Program for Catalogue creation.

REFERENCES:

1. Kumar Bittu, “Adobe Photoshop”, ISBN: 978-9350570166, V&S Publishers.
2. Photoshop 7 Complete reference , ISBN 978-0072223118 - Greenberg – McGraw Hill Publications.

Digital Open Educational Resources (DOER):

1. Photoshop Online Training

https://www.tutorialspoint.com/photoshop_online_training/index.asp

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1BASICS OF CORELDRAW				
1.1	Introduction, Getting Started, Creating A New File, Title Bar, Menu Bar, Tool Bar	2	Demonstration	Desktop PC
1.2	Work Area Views, Text Introduction, Text Tool, Converting Text &FormattingText	1	Demonstration	Desktop PC
1.3	Changing the Font Size Decorating the Text	2	Demonstration	Desktop PC
1.4	Changing the Alignment, Applying Effects	1	Demonstration	Desktop PC
UNIT -2IMAGE & LAYOUT				
2.1	Bitmap Images, Vector Image, Resizing, Rotating, Skewing Moving, Cropping	2	Demonstration	Desktop PC
2.2	Importing Images, Adding Special Effects, Converting to Bitmap, Exporting Images.	1	Demonstration	Desktop PC
2.3	Page Layout, Changing the Page Size, Changing the Layout, Applying Styles	2	Demonstration	Desktop PC
2.4	Applying Bitmaps to the Background, Changing the Background, Adding a Page Frame, Moving Between Pages.	1	Demonstration	Desktop PC
UNIT -3INTRODUCTION TO ADOBE PHOTOSHOP				
3.1	About Photoshop, Exploring the Toolbox, The New CS4	1	Demonstration	Desktop PC

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
	Applications Bar & the Options Bar			
3.2	Exploring Panels & Menus, Creating & Viewing a New Document	2	Demonstration	Desktop PC
3.3	Customizing the Interface, Setting Preferences	2	Demonstration	Desktop PC
3.4	Navigating Photoshop, Menusand panels	1	Demonstration	Desktop PC
UNIT -4 GETTING STARTED WITH LAYERS				
4.1	Understanding the Layer, Creating, Selecting, Linking &Deleting Layers	2	Demonstration	Desktop PC
4.2	Locking & Merging Layers, Copying Layers, Using Perspective	1	Demonstration	Desktop PC
4.3	Layer Styles, Filling &Grouping Layers, Introduction to Blending Modes	1	Demonstration	Desktop PC
4.4	Blending Modes, Opacity & Fill Creating & Modifying Text	2	Demonstration	Desktop PC
UNIT -5 PHOTO RETOUCHING				
5.1	The Red Eye Tool, The Clone Stamp Tool, The Patch Tool & Healing Brush Tool	2	Demonstration	Desktop PC
5.2	The Spot Healing Brush Tool, The Color Replacement Tool	2	Demonstration	Desktop PC
5.3	The Toning & Focus ToolsPainting with History brush tools	2	Demonstration	Desktop PC

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Construct simple vector graphics	K2 & K3	PSO1& PSO2

	by using basic drawing elements and shape commands.		
CO 2	Apply basic shape commands and image effects in processing raster format pictures.	K2 & K3	PSO2 &PSO3
CO 3	Design and edit images using image-editing tool.	K2 & K3	PSO2 &PSO3
CO 4	Apply layer features for creating images for web and print.	K2 & K3	PSO2 &PSO3
CO 5	Develop effective graphics for both web and print media.	K3 & K4	PSO6 & PSO8

CIA	
Scholastic	**35**
Non Scholastic	**5**
	40

EVALUATION PATTERN

SCHOLASTIC		**NON - SCHOLASTIC**	**MARKS**		
C1	**C2**	**C3**	**CIA**	**ESE**	**Total**
20	**15**	**5**	**40**	**60**	**100**

C1 – Average of Two Model Test Marks

C2 - Average of Program Completion and Record Work

C3 - Non-Scholastic

Mapping of COs with PSOs

CO/PSO	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**	**PSO8**
CO1	**3**	**3**	**2**	**2**	**2**	**1**	**1**	**1**
CO2	**2**	**3**	**2**	**2**	**2**	**2**	**2**	**1**

CO3	2	2	3	2	2	2	2	2
CO4	2	2	3	2	2	2	2	2
CO5	2	2	2	2	2	3	1	1

Mapping of C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	3	1
CO3	1	2	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2**
♦ Weakly Correlated -**1**

COURSE DESIGNER:

1. **Staff Name: MRS. T. CHARANYA NAGAMMAL**

Forwarded By

V. Mageshwari

HOD'S Signature

& Name