PG DEPARTMENT OF COMPUTER SCIENCE
TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty   :Mrs.K.Kavitha

Department   : Computer Science / IT / BCA

Programme   :B.Sc Computer Science/BCA

Programme Code   :UCS/UCA

Name of the Paper   : 1.ASP.Net
                                 2.Software Engineering

Lecture Hours/ Practical Hours   : 6/week
                                       3/week

B. ABOUT THE COURSE:

Name of the Course	Course Objectives	Course Outcomes	Teaching Methodology
ASP.Net	• This course is designed to provide the knowledge of Dot Net Frameworks along with ASP.Net and C# • Set up a programming environment for ASP.net programs. • Configure an asp.net application. • Creating ASP.Net applications using standard .net controls. • Develop a data driven web application. • Connecting to data sources and managing them.	▪ Understand the fundamental concepts of .NET frame work ▪ Discuss the use of various web controls and rich controls ▪ Infer State Management techniques in asp.net webpages ▪ Discuss and extend data list and data grid controls ▪ Demonstrate the database connectivity in ASP.NET ▪ Comprehend the need for XML in performance tuning	• PPT • PDF • STUDY MATERIAL • NPTEL VIDEOS • LECTURER VIDEOS
Software Engineering	• Knowledge of basic SW engineering methods and practices, and their appropriate application. • Describe software engineering layered technology and Process frame work. • A general understanding of software process models such as the waterfall and evolutionary models. • Understanding of software requirements and the SRS	• An ability to design and conduct experiments, as well as to analyze and interpret data. • An ability to function on multi-disciplinary teams. • An ability to identify, formulate, and solve engineering problems. • An understanding of professional and ethical responsibility.	

	documents.
	• Understanding of the role of project management including planning, scheduling, risk management, etc.

C. **PLAN OF THE WORK:**

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
ASP.Net Software Engineering	I/Module - I	The .NET Framework Introduction to Software Engineering	04.08.2021 to 08.08.2021	5	-	-
ASP.Net Software Engineering	I/ Module - II	.NET Languages-Understanding Namespaces & Assemblies Software Process - Software Process Models	10.08.2021 to 17.08.2021	5	-	-
ASP.Net Software Engineering	I/ Module - III	Setting up ASP.NET and IIS- Starting VS.NET Project Requirements Engineering - Importance of Requirements	18.08.2021 to 21.08.2021	4	-	-
ASP.Net Software Engineering	I/ Module - IV	Web Form Designer – Writing Code Types of Requirements - Steps involved in Requirements Engineering	24.08.2021 to 27.08.2021	4	-	**Unit I -18 hrs**
ASP.Net Software Engineering	II/Module - I	Stepping Up to Web Controls – Web Control Classes Analysis Modeling Approaches - Structured Analysis - Object Oriented	28.08.2021 to 01.09.2021	4	-	-

		Analysis				
ASP.Net Software Engineering	II/ Module - II	AutoPostBack and Web Control Events. Design Process and Concepts - Basic Issues in Software Design	02.09.2021 to 05.09.2021	4	-	-
ASP.Net Software Engineering	II/ Module - III	Calendar – AdRotator Characteristics of Good Design - Software Design and Software Engineering	07.09.2021 to 10.09.2021	4	-	-
ASP.Net Software Engineering	II/ Module - IV	Validation - Validation control Function Oriented System vs Object Oriented System - Modularity, Cohesion, Coupling, Layering	11.09.2021 to 14.09.2021	3	-	-
ASP.Net Software Engineering	II/ Module - V	Understanding Regular Expression Real Time Software Design - Design Models - Design Documentation	15.09.2021 to 17.09.2021	3		**Unit II -18 hrs**
ASP.Net Software Engineering	III/Module - I	View State – Transferring Information- Cookies Fundamental Parts of Object Oriented Approach	18.09.2021 to 22.09.2021	4	-	-
ASP.Net Software Engineering	III/ Module - II	Session State – Session State Configuration Data Hiding and Class Hierarchy Creation -	23.09.2021 to 26.09.2021	4	-	-

		Relationships				
ASP.Net Software Engineering	III/ Module - III	Application State Role of UML in OO Design - Design Patterns	28.09.2021 to 01.10.2021	4	-	-
ASP.Net Software Engineering	III/ Module - IV	Characteristics of ADO.NET Frameworks - Object Oriented Analysis	03.10.2021 to 06.10.2021	3	-	-
ASP.Net Software Engineering	III/ Module - V	ADO.NET Object Model Golden Rules of User Interface Design - User Interface Models - Usability	07.10.2021 to 09.10.2021	3	-	**Unit III -18 hrs**
ASP.Net Software Engineering	IV/Module - I	Creating a Connection – Using Command with Data Reader Introduction to Software Measurement and Metrics	10.10.2021 to 14.10.2021	4	-	-
ASP.Net Software Engineering	IV/ Module - II	Updating Data – Accessing Disconnected Data Software Configuration -	15.10.2021 to 19.10.2021	4	-	-
ASP.Net Software Engineering	IV/ Module - III	Using Templates with DataList- Data Binding with Multiple Templates – Introduction to Software Testing	20.10.2021 to 23.10.2021	4	-	-

ASP.Net	IV/ Module - IV	Selecting Items– Editing Items	24.10.2021 to 28.10.2021	3	-	-
Software Engineering		Software Maintenance				
ASP.Net	IV/ Module - V	Paging with DataGrid – Sorting with DataGrid.	29.10.2021 to 02.11.2021	3	-	**Unit IV -18 hrs**
Software Engineering		Project Management Introduction				
ASP.Net	V/Module - I	Basics – XML Classes	03.11.2021 to 05.11.2021	3	-	-
Software Engineering		Introduction to Web - General Web Characteristics - Web Application Categories - Working of Web Application				
ASP.Net	V/ Module - II	XML Validation	06.11.2021 to 09.11.2021	3	-	-
Software Engineering		Advantages and Drawbacks of Web Applications - Web Engineering - Emerging Trends in Software Engineering				
ASP.Net	V/ Module - III	XML Display and Transforms	10.11.2021 to 12.11.2021	3	-	-
Software Engineering		Web 2.0 - Rapid Delivery - Open Source Software Development - Security Engineering				
ASP.Net	V/ Module - IV	XML in ADO.NET	16.11.2021 to 18.11.2021	3	-	-
		Service Oriented				

Software Engineering		Software Engineering - Web Service - Software as a Service - Service Oriented Architecture				
ASP.Net Software Engineering	V/ Module - V	Caching Cloud Computing - Aspect Oriented Software Development -	19.11.2021 to 21.11.2021	3	-	-
ASP.Net Software Engineering	V/ Module - VI	Data Caching Test Driven Development - Social Computing	23.11.2021 to 25.11.2021	3	-	**Unit IV -18 hrs** **Total-90 hrs**

D. <u>ACTIVITIES:</u>

Activities Name	Details
Test	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Mid- Sep 4th Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week • Mod-Nov 1st Week
Assignment	• Unit I- Aug 2nd Week • Unit II- Sep 3rd Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Oct 4th Week
Quiz	• Unit I- Aug 1st Week • Unit II- Sep 1st Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week

Seminar **Mentor/Mentee Meeting**	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week • Weekly once

PRINCIPAL

PG DEPARTMENT OF COMPUTER SCIENCE
TEACHING PLAN

A. GENERAL INFORMATION

Name of the Faculty   : Mrs.K.Kavitha

Department   : Computer Science / IT / BCA

Programme   : M.Sc Computer Science

Programme Code   : PCS

Name of the Paper   : Big Data Analytics

Lecture Hours/ Practical Hours   : 5 hrs /week

B. ABOUT THE COURSE:

Name of the Course	Course Objectives	Course Outcomes	Teaching Methodology
BigData Analytics	• Understand the Big Data Platform and its Use cases • Provide an overview of Apache Hadoop • Provide HDFS Concepts and Interfacing with HDFS • Understand Map Reduce Jobs • Provide hands on Hodoop Eco System • Apply analytics on Structured, Unstructured Data. • Exposure to Data Analytics with R.	• To provide an overview of an exciting growing field of Big Data analytics. • To discuss the challenges traditional data mining algorithms face when analyzing Big Data. • To introduce the tools required to manage and analyze big data like Hadoop, NoSql MapReduce.. • To teach the fundamental techniques and principles in achieving big data analytics with scalability and streaming capability. • To introduce to the students several types of big data like social media, web graphs and data streams.	• PPT • PDF • STUDY MATERIAL • NPTEL VIDEOS • LECTURER VIDEOS

C. PLAN OF THE WORK:

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
BigData Analytics	I/Module - I	• The Evolution of Data Management – Understanding the waves of Managing Data	04.08.2021 to 08.08.2021	4	-	-

BigData Analytics	I/ Module - II	• Defining Big Data – Building a Successful Big Data Management Architecture	10.08.2021 to 17.08.2021	3	-	-
BigData Analytics	I/ Module - III	Exploring the Big Data Stack – Redundant Physical Infrastructure – Security Infrastructure – Operational Databases	18.08.2021 to 21.08.2021	4	-	-
BigData Analytics	I/ Module - IV	Big Data Analytics – Big Data Applications	24.08.2021 to 27.08.2021	4	-	**Unit I -15 hrs**
BigData Analytics	II/Module - I	Using Big Data to get Results – Modifying Business Intelligence Products to Handle Big Data	28.08.2021 to 01.09.2021	4	-	-
BigData Analytics	II/ Module - II	Studying Big Data Analytics Examples – Big Data Analytics Solutions	02.09.2021 to 05.09.2021	3	-	-
BigData Analytics	II/ Module - III	Building New Models and Approaches to Support Big Data	07.09.2021 to 10.09.2021	3	-	-

BigData Analytics	II/ Module - IV	Characteristics of a Big Data Analysis Framework	11.09.2021 to 14.09.2021	3	-	-
BigData Analytics	II/ Module - V	Understanding Different Approaches to Big Data Analysis	15.09.2021 to 17.09.2021	3		**Unit II -15 hrs**
BigData Analytics	III/Module - I	Making Big Data a Part of Your Operational Process - Integrating Big Data	18.09.2021 to 22.09.2021	3	-	-
BigData Analytics	III/ Module - II	Incorporating big data into the diagnosis of diseases - Understanding Big Data Workflows	23.09.2021 to 26.09.2021	3	-	-
BigData Analytics	III/ Module - III	Security in Context with Big Data - Understanding Data Protection Options	28.09.2021 to 01.10.2021	3	-	-
BigData Analytics	III/ Module - IV	The Data Governance Challenge - Putting the Right Organizational Structure in Place	03.10.2021 to 06.10.2021	3	-	-

BigData Analytics	III/ Module - V	Developing a Well Governed and Secure Big Data Environment.	07.10.2021 to 09.10.2021	3	-	**Unit III -15 hrs**
BigData Analytics	IV/Module - I	Integrating Big Data with the Traditional Data Warehouse - Big Data Analysis and the Data Warehouse	10.10.2021 to 14.10.2021	3	-	-
BigData Analytics	IV/ Module - II	Changing the Role of the Data Warehouse - Changing Deployment Models in the Big Data Era	15.10.2021 to 19.10.2021	3	-	-
BigData Analytics	IV/ Module - III	Examining the Future of Data Warehouses,Defining the Cloud in the Context of Big Data	20.10.2021 to 23.10.2021	3	-	-
BigData Analytics	IV/ Module - IV	Cloud Deployment and Delivery Models - The Cloud as an Imperative for Big Data	24.10.2021 to 28.10.2021	3	-	-
BigData Analytics	IV/ Module - V	Making Use of the Cloud for Big Data - Providers in the Big Data Cloud Market	29.10.2021 to 02.11.2021	3	-	**Unit IV -15 hrs**

BigData Analytics	V/Module - I	Tracing the Origins of MapReduce - Understanding the map Function - Adding the reduce Function	03.11.2021 to 05.11.2021	3	-	-
BigData Analytics	V/ Module - II	Explaining Hadoop - Understanding the Hadoop Distributed File System	06.11.2021 to 09.11.2021	3	-	-
BigData Analytics	V/ Module - III	HadoopMapReduce - The Hadoop Foundation and Ecosystem	10.11.2021 to 12.11.2021	3	-	-
BigData Analytics	V/ Module - IV	Building a Big Data Foundation with the Hadoop Ecosystem - Managing Resources and Applications with Hadoop YARN	16.11.2021 to 18.11.2021	3	-	-
BigData Analytics	V/ Module - V	Storing Big Data with HBase - Mining Big Data with Hive - Interacting with the Hadoop Ecosystem	19.11.2021 to 21.11.2021	3	-	**Unit V -15 hrs** **Total-75 hrs**

D. <u>ACTIVITIES:</u>

Activities Name	Details
Test	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Mid- Sep 4th Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week

	• Mod-Nov 1st Week
Assignment	• Unit I- Aug 2nd Week • Unit II- Sep 3rd Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Oct 4th Week
Quiz	• Unit I- Aug 1st Week • Unit II- Sep 1st Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week
Seminar	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week
Mentor/Mentee Meeting	• Weekly once

PRINCIPAL

PG DEPARTMENT OF COMPUTER SCIENCE

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty   **:** Mrs.K.Kavitha

Department   **:** Computer Science

Programme   **:** B.Sc Computer Science/NME

Programme Code   **:** UCS/UCA

Name of the Paper   **:** Animation Lab/ ASP.Net Lab

Lecture Hours/ Practical Hours   **:** 2 hrs /week

B. <u>ABOUT THE COURSE:</u>

Name of the Course	Course Objectives	Course Outcomes	Teaching Methodology
Animation Lab	• To give an overall view of multimedia tools. • To understand and differentiate text, image, video & audio • To create animated sequences from the development of the original concept through design to video production. • The computer graphics course prepares students for activities involving in design, development and testing of modeling, rendering, shading and animation. • To understand about data compression techniques, image compression techniques like JPEG, video compression techniques like MPEG, and the basic concepts about animation.	• Communicate ideas, believable action and emotion effectively by employing principles of *animation* and performance in all aspects of drawing. • Integrate the concepts, principles and theories involved in the physics of animation in all aspects of drawing. • Design layouts and backgrounds that incorporate principles of composition, perspective and colour, with speed, accuracy and dexterity, using a variety of media. • Using OpenGL for Graphics • Programming User-interface issues	• Chalk & Talk • Classes through Practical

| ASP.Net LAB | • To acquire skills in SQL statements with various constructs
• To acquire skills in PL/SQL Programming
• To practice with stored Objects,functions,procedures,triggers
• Design different views of tables for different users and to apply embedded and nested queries.
• Design and implement a database for a given problem according to well known design principles that balance data retrieval performance with data consistency. | • Design forms using various web controls
• Apply rich controls and validation controls to the web page
• Illustrate cookies, session and application state in a web page
• Create and manipulate the data in the database using ADO.NET.
• Create a template using data list and data grid
• Build an application using XML | |

C. **PLAN OF THE WORK:**

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Animation Lab	Flash	Introduction to Flash	04.08.2021 to 08.08.2021	-	2+2	-
	ASP.Net	Introduction to ASP.Net				
ASP.Net Lab	Ex.No.1- Flash	Basic Drawing and Painting.	10.08.2021 to 17.08.2021	-	2+2	-
	Ex.No.1- ASP.Net	Form Design using Various Web Controls				
	Ex.No.2- Flash	Working with Strokes and Fills	18.08.2021 to 21.08.2021	-	2+2	-
	Ex.No.2- ASP.Net	Ad Rotator and Calendar Control, Login Control (Page should expire after 3 wrong attempts)				
	Ex.No.3- Flash	Creating Custom Colors, Gradients, and Line Styles Transforming and Grouping Objects	24.08.2021 to 27.08.2021	-	2+2	-
	Ex.No.3-	Validation				

ASP.Net	Controls				
Ex.No.4- Flash	Creating and Managing Multiple Layers	28.08.2021 to 01.09.2021	-	2+2	-
Ex.No.4- ASP.Net	Cookie Manipulation				
Ex.No.5- Flash	Converting Text into Shapes	02.09.2021 to 05.09.2021	-	2+2	-
Ex.No.5- ASP.Net	State Management (using Session and Application)				
Ex.No.6- Flash	Animate using motion, shape, Tweening , and actions	07.09.2021 to 10.09.2021	-	2+2	-
Ex.No.6- ASP.Net	Data Retrieval, Updating using ADO.NET (using Stored Procedure)				
Ex.No.7- Photoshop	Illustrate the use of Blur tool using an Image	11.09.2021 to 14.09.2021	-	2+2	-
Ex.No.7- ASP.Net	Template Creation using DataList and DataGrid				
Ex.No.8- Photoshop	Create a new layer and load an image on to it. Add a text object using Horizontal type mask tool and vertical mask tool.	15.09.2021 to 17.09.2021	-	2+2	-
Ex.No.8- ASP.Net	Sorting and Paging using DataGrid				
Ex.No.9- Photoshop	Illustrate the use of Crop tool using an image	18.09.2021 to 22.09.2021	-	2+2	-
Ex.No.9- ASP.Net	Day Planner Preparation using XML and ADO•NET				
Ex.No.10- ASP.Net	Data Caching	22.09.2021 to 26.09.2021	-	2	-

D. ACTIVITIES:

Activities Name	Details
	• Practical Program- Aug 2rd Week

Test	• Practical Program - Sep 1st Week • Mid- Sep 4th Week • Practical Program - Oct 1st Week • Practical Program - Oct 2nd Week • Model - Oct 4th Week
Assignment	-
Quiz	-
Seminar	-
Mentor/Mentee Meeting	Weekly once

PRINCIPAL

Teaching Plan

Name of the Faculty : Dr. S. Thaiyalnayaki, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** BCS

Lecture Hours/ Practical Hours   **:** 6 Hrs / Week   - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Database Systems		• Distinguish between data and information and Knowledge • Distinguish between file processing system and DBMS • Describe DBMS its advantages and disadvantages • Describe Database users including data base administrator • Describe data models, schemas and instances. • Describe DBMS Architecture & Data Independence • Describe Data Language	▪ Emphasize the need, role, importance and uses of databases in application development ▪ Design E-R modeling for a given situation and provide the foundation for development of relational database structure. ▪ Identify the advantages of the database approach over the file based data storage system. ▪ Distinguish between different models of file organizing, storing and using of data. ▪ Understand the relational model and relational algebra operations. ▪ Normalize the relational tables applying normalization rules. ▪Apply PL/SQL procedural interfaces statement on relational tables as per requirements.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

C. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Database Systems	I/Module - I	Introduction about Database System, Database System Applications	09/08/2021 to 12/08/2021	4	-	-
Database Systems	I/ Module - II	Database Languages, Transaction Management , Database Architecture	13/08/2021 to 18/08/2021	5	-	-
Database Systems	I/ Module - III	Database Users and Database Administrators, Structure of Relational Databases	19/08/2021 to 26/08/2021	5	-	-

Database Systems	I/ Module – IV	Database Design, ER Model, Constraints, Entity Relationship Diagrams	27/08/2021 to 31/08/2021	4	-	**Unit I -18 hrs**
Database Systems	II/Module - I	Relational Algebra Operations, The Tuple Relational Calculus, The Domain Relational Calculus	01/09/2021 to 04/09/2021	4	-	-
Database Systems	II/ Module - II	SQL : Data Types, Basic Structure of SQL Queries	06/09/2021 to 09/09/2021	4	-	-
Database Systems	II/ Module - III	Set Operations, Aggregate Functions, Null Values	11/09/2021 to 15/09/2021	4	-	-
Database Systems	II/ Module - IV	Nested Sub-Queries, Modification of the Database	16/09/2021 to 18/09/2021	3	-	-
Database Systems	II/ Module - V	Views	20/09/2021 to 22/09/2021	3		**Unit II - 18 hrs**
Database Systems	III/Module - I	Pitfalls in Relational Database Design, Decomposition, Functional Dependencies	23/09/2021 to 27/09/2021	4	-	-
Database Systems	III/ Module – II	Normalization : 1st Normal form, 2nd Normal Form, 3rd Normal Form	28/09/2021 to 01/10/2021	4	-	-
Database Systems	III/ Module - III	4th Normal Form, 5th Normal Form Demoralization	02/10/2021 to 06/10/2021	4	-	-
Database Systems	III/ Module - IV	Database Security requirements Protecting the data within the database	07/10/2021 to 09/10/2021	3	-	-
Database Systems	III/ Module - V	Granting and Revoking privileges Data Encryption	11/10/2021 to 13/10/2021	3	-	**Unit III - 18 hrs**
Database Systems	IV/Module - I	PL/SQL : History, Fundamentals, Block Structure, Comments, Data Types, Other Data Types	14/10/2021 to 18/10/2021	4	-	-
Database Systems	IV/ Module - II	PL/SQL: Declaration, Assignment Operation, Bind Variables, Substitution	19/10/2021 to 22/10/2021	4	-	-
Database Systems	IV/ Module - III	PL/SQL : Variables, Arithmetic Operator, Control Structures	23/10/2021 to 27/10/2021	4	-	-
Database Systems	IV/ Module - IV	PL/SQL: Nested Blocks, SQL in PL/SQL	28/10/2021 to 30/10/2021	3	-	-
Database Systems	IV/ Module - V	Data Manipulation, Transaction Control Statements	01/11/2021 to 03/11/2021	3	-	**Unit IV - 18 hrs**
Database Systems	V/Module - I	PL/SQL : Cursors , Types of Cursors	05/11/2021 to 09/11/2021	4	-	-

Database Systems	V/ Module - II	Cursor for loops, Select… for update, where current of clause	10/11/2021 to 13/11/2021	4	-	-
Database Systems	V/ Module - III	Cursor with parameters, cursor variables	15/11/2021 to 17/11/2021	3	-	-
Database Systems	V/ Module - IV	Exceptions	18/11/2021 to 20/11/2021	3	-	-
Database Systems	V/ Module - V	Types of Exceptions	22/11/2021 to 25/11/2021	4	-	**Unit V - 18 hrs**

D. ACTIVITIES

Activity Name	Details
Test	- Unit I- Aug 4th Week - Unit II- Sep 2nd Week - Mid- Oct 1st Week - Unit III- Oct 2nd Week - Unit IV- Oct 3rd Week - Unit V- Nov 1st Week - Mod-Nov 2nd Week
Assignment	- Unit I- Aug 3rd Week - Unit II- Sep 4th Week - Unit III- Oct 3rd Week - Unit IV- Oct 4th Week - Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL

Principal
A.D.M. College For Women
Autonomous, Nagapattinam.

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Dr. S. Thaiyalnayaki

Department **:** Computer Science

Programme **:** M.Sc

Programme Code **:** PCS

Name of the Paper **:** Data Science using Python

Lecture Hours/ Practical Hours **:** 5 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Data Science using Python	MXE5	• Explore Python language fundamentals, including basic syntax, variables, and types • Create and manipulate regular Python lists • Use functions and import packages • Build Numpy arrays, and perform interesting calculations • Create and customize plots on real data • Supercharge your scripts with control flow, and get to know the Pandas DataFrame	• Understanding the basic concepts of Python • Preparing and pre-processing data • Visualizing the results of analytics effectively • Basic understanding of NumPy and Pandas • Ability to use conditional loops and list by python • Learn the Visualization through Matplotlib	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Data Science using Python	I/Module - I	Introduction to Python, Essential Python Libraries	09/08/2021 to 12/08/2021	4	-	-
	I/ Module - II	Installation and Setup Python	13/08/2021 to 16/08/2021	3	-	-
	I/ Module - III	Python Interpreter, Ipython Basics	17/08/2021 to 23/08/2021	4	-	-
	I/ Module - IV	Data Structure and Sequences: Tuple, List	24/08/2021 to 27/08/2021	4	-	Unit I -15 hrs
	II/Module - I	Numpy Basics: Arrays and Vectorized Computation, A Multidimensional Array Object	28/08/2021 to 01/09/2021	4	-	-
	II/ Module - II	Universal Functions	02/09/2021 to 04/09/2021	3	-	-
	II/ Module - III	File Input and Output with Arrays	06/09/2021 to 08/09/2021	3	-	-
	II/ Module - IV	Linear Algebra	09/09/2021 to 13/09/2021	3	-	-
	II/ Module - V	Random Number Generation	14/09/2021 to 16/09/2021	3		Unit II -15 hrs
	III/Module - I	Pandas: Introduction, Data Structures	17/09/2021 to 20/09/2021	3	-	-
	III/ Module - II	Essential functionality summarizing and computing Descriptive Statistics	21/09/2021 to 23/09/2021	3	-	-
	III/ Module - III	Handling missing data	24/09/2021 to 27/09/2021	3	-	-
	III/ Module - IV	Hierarchical Indexing	28/09/2021 to 30/09/2021	3	-	-
	III/ Module - V	Other pandas topics	01/10/2021 to 04/10/2021	3	-	Unit III - 15 hrs
	IV/Module - I	Data Loading, Storage and File Formats: Reading and Writing data in text format	05/10/2021 to 07/10/2021	3	-	-
	IV/ Module - II	Binary Data Formats	08/10/2021 to 11/10/2021	3	-	-
	IV/ Module - III	Interacting with HTML and Web APIs	12/10/2021 to 14/10/2021	3	-	-
	IV/ Module - IV	Interacting with Databases: Data Wrangling	15/10/2021 to 18/10/2021	3	-	-
	IV/ Module - V	Data Cleaning, Data Transformation, Data Merge and Data Reshape	19/10/2021 to 21/10/2021	3	-	Unit IV - 15 hrs
	V/Module - I	Plotting and Visualization: Brief Matplotlib API primer	22/10/2021 to 26/10/2021	4	-	-
	V/ Module - II	Plotting functions in Pandas	27/10/2021 to 30/10/2021	4	-	-
	V/ Module - III	Python visualization tool ecosystem	01/11/2021 to 05/11/2021	4	-	-
	V/ Module - IV	Time Series	06/11/2021 to	3	-	Unit

				10/11/2021			V - 15 hrs T ot al- 75 hr s

C. **PLAN OF THE WORK:**

E. **ACTIVITIES:**

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Nov 1st Week • Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week • Unit II- Sep 4th Week • Unit III- Oct 3rd Week • Unit IV- Oct 4th Week • Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Dr. S. Thaiyalnayaki, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** BCS

Lecture Hours/ Practical Hours   **:** 6 Hrs / Week   - Practical Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Database Systems Lab	RUXS2Y	• To acquire skills in SQL statements with various constructs • To acquire skills in PL/SQL Programming • To practice with stored Objects,functions,procedures,triggers • Design different views of tables for different users and to apply embedded and nested queries. • Design and implement a database for a given problem according to well known design principles that balance data retrieval performance with data consistency.	• Design and implement a database schema for a given problem-domain • Normalize a database • Declare and enforce integrity constraints on a database using a state-of-the-artRDBMS • Programming PL/SQL including stored procedures, stored functions, cursors,packages	• Chalk and Board • Running programs in systems

F. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Database Systems Lab	-	Introduction given to the students, how programs run?, Where it will be used in real time with sample programs?	09/08/2021 to 13/08/2021	5	-	-
Database Systems Lab	Exercise : I	Creating a Tables Modifying a Table	14/08/2021 to 19/08/2021	5	-	-
Database Systems Lab	Exercise : I	Altering table, Dropping Table	23/08/2021 to 26/08/2021	4	-	-
Database Systems Lab	Exercise : II	Inserting rows, Modifying rows	27/08/2021 to 31/08/2021	4	-	-

Database Systems Lab	Exercise : II	Altering rows, Deleting rows	01/09/2021 to 04/09/2021	4	-	-
Database Systems Lab	Exercise : III	Working with Decode and case	06/09/2021 to 09/09/2021	4	-	-
Database Systems Lab	Exercise : IV	Creating table with Adding, Dropping	11/09/2021 to 15/09/2021	4	-	-
Database Systems Lab	Exercise : IV	Creating table with Disabling/Enabling Constraints	16/09/2021 to 18/09/2021	3	-	-
Database Systems Lab	Exercise : V	Retrieving rows with character functions	20/09/2021 to 22/09/2021	3	-	-
Database Systems Lab	Exercise : VI	Retrieving rows with Number functions	23/09/2021 to 27/09/2021	4	-	-
Database Systems Lab	Exercise : VI	Retrieving rows with Date Functions	28/09/2021 to 01/10/2021	4	-	-
Database Systems Lab	Exercise : VII	Retrieving rows with group functions	02/10/2021 to 06/10/2021	4	-	-
Database Systems Lab	Exercise : VII	Retrieving rows with having functions	07/10/2021 to 09/10/2021	3	-	-
Database Systems Lab	Exercise: VIII	Retrieving rows with sub queries	11/10/2021 to 13/10/2021	3	-	-
Database Systems Lab	Exercise : VIII	Retrieving rows with sub queries	14/10/2021 to 18/10/2021	4	-	-
Database Systems Lab	-	PL/SQL Introduction	19/10/2021 to 22/10/2021	4	-	-
Database Systems Lab	-	PL/SQL Sample Programs and How to run it?	23/10/2021 to 27/10/2021	4	-	-
Database Systems Lab	Exercise : IX	Control Structures: IF, For with PL/SQL	28/10/2021 to 30/10/2021	3	-	-
Database Systems Lab	Exercise :IX	Control Structures: While, Do-while, Nested if with PL/SQL	01/11/2021 to 03/11/2021	3	-	
Database Systems Lab	Exercise : X	Implicit Cursor with PL/SQL	05/11/2021 to 08/11/2021	3	-	-
Database Systems Lab	Exercise : X	Explicit Cursor with PL/SQL	09/11/2021 to 11/11/2021	3	-	-
Database Systems Lab	Exercise : XI	Exception Handling with PL/SQL	12/11/2021 to 15/11/2021	3	-	-
Database Systems Lab	Exercise : XI	Try, catch -Exception Handling PL/SQL	16/11/2021 to 18/11/2021	3	-	-
Database Systems Lab	Exercise :XII	No Exception Handling with PL/SQL	19/11/2021 to 22/11/2021	3	-	-
Database Systems Lab	Exercise : XII	Triggers with PL/SQL	23/11/2021 to 25/11/2021	3	-	-

D. **ACTIVITIES:**

Activity Name	Details

Test	• Aug 4th Week
	• Sep 2nd Week
	• Mid- Oct 1st Week
	• Oct 2nd Week
	• Oct 3rd Week
	• Nov 1st Week
	• Mod-Nov 2nd Week

PRINCIPAL

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TEACHING PLAN

A. GENERAL INFORMATION

Name of the Faculty : Dr. S. Thaiyalnayaki, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** M.Sc

Programme Code   **:** PCS

Lecture Hours/ Practical Hours   **:**   5 Hrs / Week   - Practical Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Advanced Python Lab		• Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python. • Express different Decision Making statements and Functions. • Understand and summarize different File handling operations. • Explain how to design GUI Applications in Python and evaluate different database operations.	• Design forms using various functions • Apply rich controls and conditional statement logic in Python • Demonstrate the functionality of stack and regular expressions through Python • Ability to Create and manipulate array functions using Numpy • Ability to Create indexing scripts using Pandas • Build applications using Pandas	• Chalk and Board • Running programs in systems

G. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Advanced Python Lab	-	Introduction given to the students, how programs run?, Where it will be used in real time with sample programs?	09/08/2021 to 13/08/2021	5	-	-
Advanced Python Lab	Exercise : I	Variables and Data Types	14/08/2021 to 19/08/2021	5	-	-
Advanced Python Lab	Exercise : II	Strings	23/08/2021 to 26/08/2021	4	-	-
Advanced Python Lab	Exercise : II	Functions	27/08/2021 to 31/08/2021	4	-	-
Advanced Python Lab	Exercise : III	Loops, Arrays	01/09/2021 to 04/09/2021	4	-	-

Advanced Python Lab	Exercise : III	Sorting	06/09/2021 to 09/09/2021	4	-	-
Advanced Python Lab	Exercise : IV	Dictionaries, Lists	11/09/2021 to 15/09/2021	4	-	-
Advanced Python Lab	Exercise : IV	Tuples	16/09/2021 to 18/09/2021	3	-	-
Advanced Python Lab	Exercise : V	Matrices	20/09/2021 to 22/09/2021	3	-	-
Advanced Python Lab	Exercise : VI	Calculator	23/09/2021 to 27/09/2021	4	-	-
Advanced Python Lab	Exercise : VI	Calculator	28/09/2021 to 01/10/2021	4	-	-
Advanced Python Lab	Exercise : VII	Array using Numpy	02/10/2021 to 06/10/2021	4	-	-
Advanced Python Lab	Exercise : VII	Array using Numpy	07/10/2021 to 09/10/2021	3	-	-
Advanced Python Lab	Exercise: VIII	Aggregation using Numpy	11/10/2021 to 13/10/2021	3	-	-
Advanced Python Lab	Exercise : VIII	Aggregation using Numpy	14/10/2021 to 18/10/2021	4	-	-
Advanced Python Lab	Exercise : IX	Data Operation using Scipy Basics	19/10/2021 to 22/10/2021	4	-	-
Advanced Python Lab	Exercise :IX	Data Operation using Scipy Basics	23/10/2021 to 27/10/2021	4	-	-
Advanced Python Lab	Exercise : X	Pandas Basics	28/10/2021 to 30/10/2021	3	-	-
Advanced Python Lab	Exercise : X	Pandas Basics	01/11/2021 to 03/11/2021	3	-	
Advanced Python Lab	Exercise : XI	Twitter API integration for tweet analysis	05/11/2021 to 08/11/2021	3	-	-
Advanced Python Lab	Exercise : XI	Twitter API integration for tweet analysis	09/11/2021 to 11/11/2021	3	-	-

E. ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

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TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Dr. S. Thaiyalnayaki

Department **:** Computer Applications

Programme **:** B.C.A

Programme Code **:** UCA

Name of the Paper **:** Software Engineering

Lecture Hours/ Practical Hours **:** 3 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Software Engineering		• Knowledge of basic SW engineering methods and practices, and their appropriate application. • Describe software engineering layered technology and Process frame work. • A general understanding of software process models such as the waterfall and evolutionary models. • Understanding of software requirements and the SRS documents. • Understanding of the role of project management including planning, scheduling, risk management, etc.	• An ability to design and conduct experiments, as well as to analyze and interpret data. • An ability to function on multi-disciplinary teams. • An ability to identify, formulate, and solve engineering problems. • An understanding of professional and ethical responsibility. • Explain needs for software specifications also they can classify different types of software requirements and their gathering techniques.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

C. PLAN OF THE WORK:

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Software Engineering	II/ Module - I	Requirement Analysis Modeling: Analysis Modeling approaches	09/08/2021 to 12/08/2021	3	-	-
Software Engineering	II/ Module - II	Structured Analysis	13/08/2021 to 18/08/2021	5	-	-
Software	II/ Module - III	Object Oriented Analysis, Design	19/08/2021	3	-	-

Engineering		and Architectural Engineering: Design process and concepts, Basic issues in software design, Characteristic of Good Design	to 26/08/2021			
Software Engineering	II/ Module -IV	Software Design and Software Engineering, Function oriented system vs Object oriented system	27/08/2021 to 31/08/2021	3	-	
Software Engineering	II/ Module – V	Modularity, Cohesion, Coupling , Real time software design, design documentation.	01/09/2021 to 04/09/2021	4		**Unit II - 18 hrs**
Software Engineering	III/Module - I	Object Oriented Concepts: Fundamental parts of object oriented approach, Data hiding and class hierarchy creation	06/09/2021 to 09/09/2021	3		
Software Engineering	III/ Module – II	Role of UML in OO Design, Design patterns	11/09/2021 to 15/09/2021	4	-	-
Software Engineering	III/ Module - III	Frameworks, Object oriented Analysis, Object oriented Design	16/09/2021 to 18/09/2021	4	-	-
Software Engineering	III/ Module - IV	User interface design: Concepts of user interface, elements of user interface, designing the user interface	20/09/2021 to 22/09/2021	4	-	-
Software Engineering	III/ Module - V	User interface evaluation, Golden rules of user interface design, Models, usability	23/09/2021 to 27/09/2021	3	-	**Unit III - 18 hrs**
Software Engineering	V/Module - I	Web Engineering: Introduction to Web, general web characteristics	28/09/2021 to 01/10/2021	3		
Software Engineering	V/ Module - II	Web application categories, working of web application	02/10/2021 to 06/10/2021	3	-	-
Software Engineering	V/ Module - III	Advantages and drawbacks of web applications	07/10/2021 to 09/10/2021	2	-	-
Software Engineering	V/ Module - IV	Web engineering, Emerging trends in software engineering	11/10/2021 to 13/10/2021	3	-	**Unit III - 11 hrs**

H. ACTIVITIES:

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Nov 1st Week • Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week • Unit II- Sep 4th Week

	• Unit III- Oct 3rd Week • Unit IV- Oct 4th Week • Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL

TEACHING PLAN

Name of the Faculty : Mrs.G.Lokeshwari, Assistant Professor of Computer Science

Department **:** Computer Science / Information Technology / Computer Applications

Programme **:** M.Sc.,

Programme Code **:** PCS

Name of the Paper **:** Modern Operating Systems

Lecture Hours/ Practical Hours **:** 4 Hrs / Week

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Modern Operating Systems		• To acquire knowledge in Distributed operating. • To know the components of distributed resource management. • To know the components and management aspects of Real time, Mobile operating systems. • Use disk management and disk scheduling algorithms for better utilization of external memory. • Recognize file system interface, protection and security mechanisms.	On completion of the Course, Students should be able to do • To understand the main components of an OS & their functions. • To study the process management and scheduling. • To understand various issues in Inter Process Communication (IPC) and the role of OS in IPC. • To understand the concepts and implementation Memory management policies and virtual memory. • To study the need for special purpose operating system with the advent of new emerging technologies.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

I.   PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Modern Operating Systems	I/Module - I	Introduction: What is operating system, The Operating System as a Extended Machine, The Operating System as a Resource Manager	26.08.2021 to 28.08.2021	3	-	Unit I - 12 hrs
Modern Operating Systems	I/ Module - II	History of Operating systems, The Operating system. Mainframe Operating systems-Server Operating System, Personal Computer Operating system	01/09/2021 to 04/09/2021	3	-	
Modern Operating Systems	I/ Module - III	Computer Hardware Review- Processor ,I/O Devices, System calls	06/09/2021 to 09/09/2021	3	-	
Modern Operating Systems	I/ Module – IV	Operating System Structure, Client and Server Model, Process, Threads, Scheduling	11/09/2021 to 15/09/2021	3	-	
Modern Operating Systems	II/Module - I	Memory Management Introduction: Basic Memory Management, Mono programming Without Swapping or Paging	16/09/2021 to 18/09/2021	3	-	Unit II - 12 hrs
Modern Operating Systems	II/ Module - II	Modeling Multiprogramming, Swapping, Memory Management with Bitmaps	20/09/2021 to 22/09/2021	3	-	
Modern Operating Systems	II/ Module - III	Linked Lists, Virtual Memory, Paging, Page Table, Translation Look side Buffers, Design Issues for Paging System	23/09/2021 to 27/09/2021	3	-	
Modern Operating Systems	II/ Module - IV	,Local Versus Global Allocation Policies, Load Control, Segmentation, The Intel Pentium	28/09/2021 to 01/10/2021	3		
Modern Operating Systems	III/Module - I	File Systems: Files, File Types, File Attributes, File Operation Memory Mapped Files, Directories	02/10/2021 to 06/10/2021	3	-	Unit III - 12 hrs
Modern Operating Systems	III/ Module – II	Single Level Directory Systems, Two Level Directory Systems, Hierarchical Directory Systems	07/10/2021 to 09/10/2021	3	-	

Modern Operating Systems	III/ Module - III	File System Implementation Input/output: Principles of I/O Hardware, Device Controllers, Memory Mapped I/O	11/10/2021 to 13/10/2021	3	-	
Modern Operating Systems	III/ Module - IV	Principles of I/O Software, Goals Of The Software , Programmed I/O-Interrupt I/O,I/O Using DMA	14/10/2021 to 18/10/2021	3	-	
Modern Operating Systems	IV/Module - I	Multimedia Operating System, Introduction to Multimedia , Multimedia Files, Multimedia Process Scheduling, Scheduling Homogeneous Processes	19/10/2021 to 22/10/2021	3	-	**Unit IV - 12 hrs**
Modern Operating Systems	IV/ Module - II	General Real Time Scheduling, Earliest Deadline First Scheduling, Dead Lock: Introduction to Dead Locks, Conditions For Deadlock	23/10/2021 to 27/10/2021	3	-	
Modern Operating Systems	IV/ Module - III	Deadlock Modeling, The Ostrich Algorithm, Dead Lock Detection and Recovery, Dead Lock Avoidance, Resource Trajectories, Safe And Unsafe States	28/10/2021 to 30/10/2021	3	-	
Modern Operating Systems	IV/ Module - IV	The Banker's Algorithm for Single Resource, The Banker's Algorithm for Multiple Resource, Deadlock Prevention.	01/11/2021 to 03/11/2021	3	-	
Modern Operating Systems	V/Module - I	Multiple Processor System: Distributed System, Network Hardware, Network Services and Protocols, File System Based Middleware, Shared Object Based	05/11/2021 to 09/11/2021	3	-	
Modern Operating Systems	V/ Module - II	Middleware, Security: The Security Environment, Threads, Intruders, Accidental Data Loss, Basics Of Cryptography	10/11/2021 to 13/11/2021	3	-	**Unit V - 12 hrs** **Total-60 hrs**
Modern Operating Systems	V/ Module - III	,Secret key, Cryptography, Digital Structure, User Authentication, Countermeasures, Attacks From Inside	15/11/2021 to 17/11/2021	3	-	

		The System, Trojan Horses, Login Spoofing				
Modern Operating Systems	V/ Module - IV	Generic Security Attacks, Attacks From Outside The System, Virus Damage Scenarios, Mobile Code, Java Security	18/11/2021 to 20/11/2021	3	-	

J. ACTIVITIES

Activity Name	Details
Test	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Mid- Sep 4th Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week • Mod-Nov 1st Week
Assignment	• Unit I- Aug 2nd Week • Unit II- Sep 3rd Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Oct 4th Week
Quiz	Quiz during November 2nd week for Unit 1 to Unit 5
Seminar	During November 2nd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Mrs.G.Lokeshwari

Department : Computer Science

Programme : B.Sc.

Programme Code : UCS

Name of the Paper : Operating Systems

Lecture Hours/ Practical Hours : **6** Hours/Week

B. ABOUT THE COURSE:

Course Objectives	Course Outcomes	Teaching Methodology
• To gain the basic knowledge about the operating systems and its various schemes and services. • To make students able to learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system. • To provide students knowledge of memory management and deadlock handling algorithms. • At the end of the course, students will be able to implement various algorithms required for management, scheduling, allocation and communication used in operating system.	• Understand the basic concept of Computer System and Operating System Structure • Gain Knowledge of the fundamental aspects of process and processor managements with deadlocks and CPU scheduling. • Introduce memory and virtual memory techniques. • Understand files, directories and its accessing methods and its structures. • Ability to know mass storage devices and its scheduling. • Understand the security on the operating system and protection mechanisms.	• PPT • PDF • STUDY MATERIAL • NPTEL VIDEOS • LECTURER VIDEOS

C. PLAN OF THE WORK:

Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
I/Module - I	INTRODUCTION: Meaning - Early Systems	09/08/2021 to 12/08/2021	3	-	
I/ Module - II	Multiprogrammed Batch Systems - Real-Time Systems.	13/08/2021 to 18/08/2021	3	-	**Unit I -18 hrs**

I/ Module - III	COMPUTER SYSTEM STRUCTURES: Computer-System Operation	19/08/2021 to 26/08/2021	3	-	
I/ Module - IV	Storage Hierarchy - General System Architecture.	27/08/2021 to 31/08/2021	3	-	
I/ Module - V	OPERATING SYSTEM STRUCTURES: System Components - System Calls	01/09/2021 to 04/09/2021	3	-	
I/ Module - VI	Virtual Machines - System Generation.	06/09/2021 to 09/09/2021	3	-	
II/Module - I	PROCESS MANAGEMENT: Processes - Process Concept - Operation on Processes	11/09/2021 to 15/09/2021	3	-	
II/ Module - II	Inter-Process Communication. CPU SCHEDULING: Basic Concepts	16/09/2021 to 18/09/2021	3	-	
II/ Module - III	Scheduling Algorithms - Real Time Scheduling. PROCESS SYNCHRONIZATION: Background	20/09/2021 to 22/09/2021	3	-	**Unit II -18 hrs**
II/ Module - IV	Critical-Section Problem - Semaphores.	23/09/2021 to 27/09/2021	3	-	
II/ Module - V	DEADLOCKS: System Model - Methods for Handling Deadlocks	28/09/2021 to 01/10/2021	3		
II/ Module - VI	Deadlock Avoidance - Recovery from Deadlock	02/10/2021 to 06/10/2021	3		
III/Module - I	MEMORY MANAGEMENT: Background - Swapping	07/10/2021 to 09/10/2021	3	-	
III/ Module - II	Paging - Segmentation with Paging	11/10/2021 to 13/10/2021	3	-	**Unit III -18 hrs**
III/ Module - III	VIRTUAL MEMORY: Demand Paging	14/10/2021 to 18/10/2021	4	-	
III/ Module - IV	Page Replacement	19/10/2021 to 22/10/2021	4	-	

III/ Module - V	Allocation of Frames - Thrashing	23/10/2021 to 27/10/2021	4	-	
IV/Module - I	FILE - SYSTEM INTERFACE: File Concept - Access Methods	28/10/2021 to 30/10/2021	3	-	
IV/ Module - II	Directory Structures File-System Implementation: File-system Structure	01/11/2021 to 03/11/2021	3	-	
IV/ Module - III	Allocation Methods - Directory Implementation - Efficiency and Performance	05/11/2021 to 09/11/2021	4	-	**Unit IV -18 hrs**
IV/ Module - IV	Recovery. MASS STORAGE STRUCTURE: Disk Structure - Disk Scheduling	10/11/2021 to 13/11/2021	4	-	
IV/ Module - V	Swap- Space Management - Stable-Storage Implementation	15/11/2021 to 17/11/2021	4	-	
V/Module - I	PROTECTION: Goals of Protection - Access Matrix - Capability Based Systems	18/11/2021 to 20/11/2021	3	-	
V/ Module - II	Language based Protection. SECURITY: The Security Problem - Authentication	22/11/2021 to 25/11/2021	3	-	
V/ Module - III	Security Systems and Facilities - Encryption	30.11.2021 to 04.12.2021	3	-	
V/ Module - IV	WINDOWS XP: Design Principles, System Components	06.12.2021 to 09.12.2021	3	-	
V/ Module - V	Environmental Subsystems, File Systems	10.12.2021 to 14.12.2021	3	-	**Unit V -18 hrs** **Total-90 hrs**
V/ Module - VI	Networking, Programmer Interface	15.12.2021 to 18.12.2021	3	-	

D. ACTIVITIES:

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week

	• Mid- Oct 1st Week
	• Unit III- Oct 2nd Week
	• Unit IV- Oct 3rd Week
	• Unit V- Nov 1st Week
	• Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week
	• Unit II- Sep 4th Week
	• Unit III- Oct 3rd Week
	• Unit IV- Oct 4th Week
	• Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

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TEACHING PLAN

Name of the Faculty : Mrs.G.Lokeshwari, Assistant Professor of Computer Science'

Department   **:**Computer Science / Information Technology / Computer Applications

Programme   **:**BCA

Programme Code   **:**UCA

Name of the Paper   : Computer graphics

Lecture Hours/ Practical Hours   : 6 Hrs / Week Lecture Hours

B.ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Computer Graphics	UKE3	• To impart the basic principles of generating primitives, shapes, package development, interactive graphics, raster graphics, two and three dimensional graphics and their transformations. • To provide comprehensive introduction about computer graphics system, design algorithms and two dimensional transformations. • To make the students familiar with techniques of clipping, three dimensional graphics and three dimensional transformations. • The computer graphics course prepares students for activities involving in design, development and testing of modeling, rendering, shading and animation.	• Understand the basics of computer graphics, different graphics systems and applications of computer graphics. • Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis. • Use of geometric transformations on graphics objects and their application in composite form. • Extract scene with different clipping methods and its transformation to graphics display device. • Explore projections and visible surface detection techniques for display of 3D scene on 2D screen.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

K. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks

Computer graphics	I/Module - I	Overview of Computer Graphics System	09/08/2021 to 12/08/2021	4	**-**	**Unit I -18 hrs**
Computer graphics	I/Module - II	Video Display Devices	13/08/2021 to 18/08/2021	5	**-**	
Computer graphics	I/Module - III	Raster Scan Systems – Random – Scan Systems	19/08/2021 to 26/08/2021	5	**-**	
Computer graphics	I/Module – IV	Graphics Monitors and Workstations	27/08/2021 to 31/08/2021	4	**-**	
Computer graphics	II/Module - I	Input Devices – Hardcopy Devices –Graphics Software	01/09/2021 to 04/09/2021	4	**-**	**Unit II -18 hrs**
Computer graphics	II/Module - II	Output Primitives: Line Drawing Algorithms – Loading the Frame Buffer	06/09/2021 to 09/09/2021	4	**-**	
Computer graphics	II/Module - III	Line Function – Circle – Generating Algorithms.	11/09/2021 to 15/09/2021	4	**-**	
Computer graphics	II/Module - IV	Attributes of Output Primitives: Line Attributes – Curve Attributes	16/09/2021 to 18/09/2021	3	**-**	
Computer graphics	II/Module - V	Color and Grayscale levels – Area fill Attributes – Character Attribute Bundled Attributes – Inquiry Functions.	20/09/2021 to 22/09/2021	3		
Computer graphics	III/Module - I	2D Geometric Transformations: Basic Transformation – Matrix Representation	23/09/2021 to 27/09/2021	4	**-**	**Unit III -18 hrs** **Unit III -18 hrs**

Computer graphics	III/Module – II	Composite Transformations – Window to View port Co-Ordinate Transformations	28/09/2021 to 01/10/2021	4	-	
Computer graphics	III/Module - III	Clipping: Point Clipping – Line Clipping – Cohen-Sutherland Line Clipping	02/10/2021 to 06/10/2021	4	-	
Computer graphics	III/Module - IV	Liang Barsky LineClipping – Polygon Clipping	07/10/2021 to 09/10/2021	3	-	
Computer graphics	III/Module - V	Sutherland – Hodgman Polygon Clipping – Curve Clipping – Text Clipping	11/10/2021 to 13/10/2021	3	-	
Computer graphics	IV/Module - I	Graphical User Interfaces and Interactive Input Methods	14/10/2021 to 18/10/2021	4	-	**Unit IV -18 hrs**
Computer graphics	IV/Module - II	The User Dialogue	19/10/2021 to 22/10/2021	4	-	
Computer graphics	IV/Module - III	Input of Graphical Data	23/10/2021 to 27/10/2021	4	-	
Computer graphics	IV/Module - IV	Input Functions	28/10/2021 to 30/10/2021	3	-	
Computer graphics	IV/Module - V	Interactive Picture Construction Techniques.	01/11/2021 to 03/11/2021	3	-	
Computer graphics	V/Module - I	Three Dimensional Concepts: 3D-Display Methods	05/11/2021 to 09/11/2021	3	-	**-** **Unit V -18 hrs** **Total-90 hrs**
Computer graphics	V/Module - II	Three Dimensional Graphics Packages	10/11/2021 to 13/11/2021	3	-	

Computer graphics	V/Module - III	3D Geometric and Modeling Transformations	15/11/2021 to 17/11/2021	3	-	
Computer graphics	V/Module - IV	Translation – Scaling	18/11/2021 to 20/11/2021	3	-	
Computer graphics	V/Module - V	Rotation	22/11/2021 to 25/11/2021	3	-	
Computer graphics	V/Module - VI	Other Transformations.	26.11.2021 to 30.11.2021	3	-	

L. ACTIVITIES

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Nov 1st Week • Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week • Unit II- Sep 4th Week • Unit III- Oct 3rd Week • Unit IV- Oct 4th Week • Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL

A.GENERAL INFORMATION

Name of the Faculty : Mrs.G.Lokeshwari, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** UCS

Name of the Paper   **:** Office Automation Lab

Lecture Hours/ Practical Hours   **:** 2 Hrs / Week - Practical Hours

B. ABOUT THE COURSE:

ne of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodol
e ation Lab		• Office tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the	• To perform documentation activities • To execute accounting	• Chalk and Board • Running program systems

		Microsoft suite of office tools.	operations	
		• Give students an in-depth understanding of why computers are essential components in business, education and society. • Provide foundational or "computer literacy" curriculum that prepares students for life-long learning of computer concepts and skills. • To acquire knowledge on editor, spread sheet and presentation software. • To train them to work on the comment based activities in MS-office system.	• To enhance presentation skills • To work on Document Management Systems • Format Text, Paragraphs, and sections • To Create and manage documents	

M. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Office Automation Lab	-	Introduction given to the students, how programs run?, Where it will be used in real time with sample programs?	09/08/2021 to 13/08/2021	2	-	-
	Exercise : I	Text Manipulation – Change the font size and type, Aligning and Justification of text, Underlining the text, indenting the text	14/08/2021 to 19/08/2021	2	-	-
	Exercise : II	Prepare a Bio-data	23/08/2021 to 26/08/2021	2	-	-
	Exercise : II	Prepare a letter	27/08/2021 to 31/08/2021	2	-	-
	Exercise : III	Using Bullets and Numbering in Paragraphs, Footer and Header, Finding and Replacing Text and Checking Spelling a)Prepare any document	01/09/2021 to 04/09/2021	2	-	-
	Exercise : III	Prepare any document in newspaper format	06/09/2021 to 09/09/2021	2	-	-
	Exercise : IV	Create a Mark sheet and find total mark, average and result	11/09/2021 to 15/09/2021	2	-	-
	Exercise : IV	Create a Mark sheet and find total mark, average and	16/09/2021 to 18/09/2021	2	-	-

		result				
Exercise : V	Create a calendar and Auto Format it.	20/09/2021 to 22/09/2021	2	**-**	-
Exercise : VI	Picture Insertion and Alignment - Prepare a handout	23/09/2021 to 27/09/2021	2	**-**	**-**
Exercise : VI	Prepare a business letter	28/09/2021 to 01/10/2021	2	**-**	**-**
Exercise : VII	Prepare an invitation	02/10/2021 to 06/10/2021	2	**-**	**-**
Exercise : VII	Usage of Formulae and Built-in Functions	07/10/2021 to 09/10/2021	2	**-**	**-**
Exercise: VIII	Usage of Formulae and Built-in Functions	11/10/2021 to 13/10/2021	2	**-**	**-**
Exercise : VIII	Editing Cells and Using Commands and Functions	14/10/2021 to 18/10/2021	2	**-**	**-**
Exercise : IX	Moving and Copying, Inserting and Deleting Rows and Columns	19/10/2021 to 22/10/2021	2	**-**	**-**
Exercise :IX	Moving and Copying, Inserting and Deleting Rows and Columns	23/10/2021 to 27/10/2021	2	**-**	**-**
Exercise : X	Paybill Preparation	28/10/2021 to 30/10/2021	2	**-**	**-**
Exercise : X	Paybill Preparation	01/11/2021 to 03/11/2021	2	**-**	
Exercise : XI	Preparation and Manipulation of Slides	05/11/2021 to 08/11/2021	2	**-**	**-**
Exercise : XI	Preparation and Manipulation of Slides	09/11/2021 to 11/11/2021	2	**-**	**-**

F. <u>ACTIVITIES:</u>

Activity Name	Details
Test	• Aug 4th Week • Sep 2nd Week • Mid- Oct 1st Week • Oct 2nd Week • Oct 3rd Week • Nov 1st Week • Mod-Nov 2nd Week

Signature of the Staff   Signature of the HOD
Signature of the Principal

Name of the Faculty :Mrs.G.Lokeshwari, Assistant Professor of Computer Science

Department   **:** Computer Science / Information Technology / Computer Applications

Programme   **:** M.Sc.,

Programme Code   **:** PCS

Name of the Paper   **:** Distributed Technologies Lab

Lecture Hours/ Practical Hours   **:** 3 Hrs / Week

B. ABOUT THE COURSE:

Name of the Course	Course Objectives	Course Outcomes	Teaching Methodology
Distributed Technologies Lab	• To provide fundamental concept of Internet, JavaScript, XML, JSP, and ASP with a view to developing professional software development skills • To examine state-of-the-art distributed systems, such as Google File System. • To design and implement sample distributed systems. • .	• After completion of the course the student will be able to use the features of Dot Net Framework along with the features of C#. • Build well-formed XML Document and implement Web Service using Java. • Students will examine how existing systems have applied the concepts of distributed • systems in designing large systems, and will additionally apply these concepts.	• Chalk and Board • Running programs in systems

C. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks

Distributed Technologies Lab	-	Introduction given to the students, how programs run?, Where it will be used in real time with sample programs?	09/08/2021 to 13/08/2021	3	-	-
Distributed Technologies Lab	Exercise : I	Create a table and insert a few records using Disconnected Access.	14/08/2021 to 19/08/2021	3	-	-
Distributed Technologies Lab	Exercise : I	Develop a project to update and delete few records using Disconnected Access	23/08/2021 to 26/08/2021	3	-	-
Distributed Technologies Lab	Exercise : II	Develop a project to view the records using GridView, DetailsView, FormView Controls.	27/08/2021 to 31/08/2021	3	-	-
Distributed Technologies Lab	Exercise : II	Develop a project to generate a crystal report from an existing database	01/09/2021 to 04/09/2021	3	-	-
Distributed Technologies Lab	Exercise : III	Design a web page that makes uses of Ad Rotator Control.	06/09/2021 to 09/09/2021	3	-	-
Distributed Technologies Lab	Exercise : IV	Design a web page involving Multi View or Wizard Control.	11/09/2021 to 15/09/2021	3	-	-
Distributed Technologies Lab	Exercise : IV	Control involving two ho spots in a web page.	16/09/2021 to 18/09/2021	3	-	-
Distributed Technologies Lab	Exercise : V	Design a simple web site that makes use of Master Pages.	20/09/2021 to 22/09/2021	3		-
Distributed Technologies Lab	Exercise : VI	Establish the security features in a simple web site with five pages.	23/09/2021 to 27/09/2021	3	-	-
Distributed Technologies Lab	Exercise : VI	features in a simple web site with five pages.	28/09/2021 to 01/10/2021	3	-	-
Distributed Technologies Lab	Exercise : VII	Use state management concepts in a mobile web application.	02/10/2021 to 06/10/2021	3	-	-
Distributed Technologies Lab	Exercise : VII	Use state management concepts in a mobile web application.	07/10/2021 to 09/10/2021	3	-	-
Distributed Technologies Lab	Exercise : VII	Use state management concepts in a mobile web application.	11/10/2021 to 13/10/2021	3	-	-
Distributed Technologies Lab	Exercise : VIII	Design a web page involving Multi View or Wizard Control.	14/10/2021 to 18/10/2021	3	-	-
Distributed Technologies Lab	Exercise : IX	Make use of Image Control involving two ho	19/10/2021	3	-	-

		spots in a web page.	to 22/10/2021			
Distributed Technologies Lab	Exercise :IX	Control involving two ho spots in a web page.	23/10/2021 to 27/10/2021	3	-	
Distributed Technologies Lab	Exercise : X	tate management concepts in a mobile web application	28/10/2021 to 30/10/2021	3	-	-
Distributed Technoogies Lab	Exercise : X	state management concepts in a mobile web application	01/11/2021 to 03/11/2021	3	-	-
Distributed Technologies Lab	Exercise : XI	Use state management concepts in a mobile web application.	05/11/2021 to 08/11/2021	3	-	-
Distributed Technologies Lab	Exercise : XII	Develop a web service to fetch a data from a table and send it across to the client.	09/11/2021 to 11/11/2021	3	-	-

G. ACTIVITIES:

Activity Name	Details
Test	- Aug 3rd Week - Sep 1st Week - Mid- Sep 4th Week - Oct 1st Week - Oct 2nd Week - Oct 4th Week - Mod-Nov 1st Week

Signature of the Staff **Signature of the HOD** **Signature of the Principal**

Teaching Plan

Name of the Faculty : Ms.V.Muthu sowmiya, Assistant Professor of Computer Science

Department **:** Computer Science

Programme **:** B.Sc

Programme Code   : BCS

Lecture Hours/ Practical Hours   : 6 Hrs / Week   - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Java programming		- To learn why Java is useful for the design of desktop and web applications. - To learn how to implement object-oriented designs with Java. - To identify Java language components and how they work together in applications. - To design and program stand-alone Java applications. - To learn how to use exception handling in Java applications.	- Upon successful completion, students will have the knowledge and skills to: - Read and understand Java-based software code of medium-to-high complexity. - Use standard and third party Java's API's when writing applications. - Understand the basic principles of creating Java applications with graphical user interface (GUI). - Create rich user-interface applications using modern API's such as JAVAFX. - Understand the fundamental concepts of computer science: structure of the computational process, algorithms and complexity of computation. - Understand the basic approaches to the design of software applications. - Apply the above to design, implement, appropriately document and test a Java application of medium complexity, consisting of multiple classes.	- Black Board - PowerPoint Presentation - E-Content - OHP - Flipped Classrooms (High Tech) - NPTEL Video - Class projects - Classroom discussion - Group discussion - Individual projects - Lecturing - Textbook assignments - Swayam videos

N. PLAN OF THE WORK

the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Re
amming	I/Module - I	Introduction about Basic concept of OOPs	09/08/2021 to 12/08/2021	1	-	
amming	I/ Module - II	Benefits of OOPS-,Java History, Java Features.	13/08/2021 to 18/08/2021	1	-	

mming	I/ Module - III	Java Environment, Java Tokens, Constants, Variables,	19/08/2021 to 26/08/2021	1	-	
mming	I/ Module – IV	Data Types - Operators and Expressions, Decision Making and Branching- Decision Making and Looping.	27/08/2021 to 31/08/2021	3	-	**Unit**
mming	II/Module - I	Classes and Objects- Constructors	01/09/2021 to 04/09/2021	2	-	
mming	II/ Module - II	Method Overloading- Static Members- Inheritance-	06/09/2021 to 09/09/2021	1	-	
mming	II/ Module - III	Overriding Methods, Final Variables, Final Methods	11/09/2021 to 15/09/2021	1	-	
mming	II/ Module - IV	Final Methods and Final Classes - Finalizer Method- Abstract Methods	16/09/2021 to 18/09/2021	1	-	
mming	II/ Module - V	Abstract Classes - Visibility Control - Arrays - Strings.	20/09/2021 to 22/09/2021	1		**Unit**
mming	III/Module - I	Introduction to Interfaces	23/09/2021 to 27/09/2021	3	-	
mming	III/ Module – II	Defining Interface, Extending Interfaces, Implementing Interfaces	28/09/2021 to 01/10/2021	1	-	
mming	III/ Module - III	Packages, Multithreaded Programming:	02/10/2021 to 06/10/2021	1	-	
mming	III/ Module - IV	Thread Life Cycle -,Thread Exceptions,Thread Priority	07/10/2021 to 09/10/2021	1	-	
mming	III/ Module - V	Synchronization.	11/10/2021 to 13/10/2021	2	-	**Unit**
mming	IV/Module - I	Managing errors and exceptions, Types of Errors- Exceptions	14/10/2021 to 18/10/2021	2	-	
mming	IV/ Module - II	Syntax of Exception Handling Code ,Multiple Catch Statements	19/10/2021 to 22/10/2021	1	-	
mming	IV/ Module - III	Using Finally Statements, Managing Input / Output Files in Java, Concept of Streams	23/10/2021 to 27/10/2021	3	-	
mming	IV/ Module - IV	Stream Classes, Character Stream Classes, Reading / Writing Characters	28/10/2021 to 30/10/2021	2	-	
mming	IV/ Module - V	Reading / Writing Bytes, Handling Primitive Data Types- Random Access files.	01/11/2021 to 03/11/2021	2	-	**Unit**
mming	V/Module - I	Event Handling Methods.	05/11/2021 to 09/11/2021	1	-	
mming	V/ Module - II	Labels- Button Control- Check Box Control	10/11/2021 to 13/11/2021	3	-	
mming	V/ Module - III	Radio Button Control, Choice Control, List Control	15/11/2021 to 17/11/2021	2	-	
mming	V/ Module - IV	Flow Layout, Border Layout, Grid Layout, Menus, Mouse Events-	18/11/2021 to 20/11/2021	1	-	
mming	V/ Module - V	Applets: Life cycle of an Applet, Development and Execution of a Simple Applet.	22/11/2021 to 25/11/2021	1	-	**Unit**

O. ACTIVITIES

P.

Activity Name	Details

Test	• Unit I- Aug 4th Week
	• Unit II- Sep 2nd Week
	• Mid- Oct 1st Week
	• Unit III- Oct 2nd Week
	• Unit IV- Oct 3rd Week
	• Unit V- Nov 1st Week
	• Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week
	• Unit II- Sep 4th Week
	• Unit III- Oct 3rd Week
	• Unit IV- Oct 4th Week
	• Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD
                                      Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Ms.V.Muthu Sowmiya

Department   : Computer Science

Programme   : B.Sc

Programme Code   : UCS

Name of the Paper   : Java Programming Lab

Lecture Hours/ Practical Hours   : 5 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodolog
amming Lab		• To understand how to design, implement, test, debug, and document programs that use basic data types and computation, simple I/O, conditional and control structures, string handling and functions. • To build software development skills using java programming for real world applications. • To implement frontend and backend of an application . • To implement classical problems using java programming. • The use of Java in a variety of technologies and on different platforms.	• Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity. • Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem • Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved. • Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.	• Chalk and Board • Running programs in sy

C. PLAN OF THE WORK:

the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	R
ogramming	Exercise : I	Write simple programs to demonstrate the various forms of inputs in Java	09/08/2021 to 12/08/2021	4	-	
	Exercise : I	Operators and expressions	13/08/2021 to 16/08/2021	3	-	
	Exercise : II	Control statements	17/08/2021 to 23/08/2021	4	-	
	Exercise : II	Write a Java Program to define a class, describe its constructor, and instantiate its Object	24/08/2021 to 27/08/2021	4	-	Unit
	Exercise : III	Write a Java Program to demonstrate method overloading	28/08/2021 to 01/09/2021	4	-	
	Exercise : IV	Write a Java Program to demonstrate single and two Dimensional arrays.	02/09/2021 to 04/09/2021	3	-	
	Exercise : IV	Write a Java program to demonstrate various methods in the String and String Buffer class	06/09/2021 to 08/09/2021	3	-	
	Exercise : V	Write a Java Program to demonstrate methods in the Vector class.	09/09/2021 to 13/09/2021	3	-	
	Exercise : VI	Write a Java Program to implement single inheritance	14/09/2021 to 16/09/2021	3		Unit
	Exercise : VI	Write a Java Program to implement multiple inheritance	17/09/2021 to 20/09/2021	3	-	
	Exercise : VII	Write a Java program to implement the concept of importing classes from user defined package and creating packages.	21/09/2021 to 23/09/2021	3	-	
	Exercise : VII	Write a Java program to implement the concept of threading by using Thread class and Runnable interface.	24/09/2021 to 27/09/2021	3	-	
	Exercise: VIII	Write a Java program to implement the concept of Exception Handling.	28/09/2021 to 30/09/2021	3	-	
	Exercise : VIII	Write a Java program to implement the concept of Exception Handling.	01/10/2021 to 04/10/2021	3	-	Unit
	-	Write a Java program using Applet	05/10/2021 to 07/10/2021	3	-	
	-	Display a message Using Applet	08/10/2021 to 11/10/2021	3	-	
	Exercise : IX	for passing parameters Using Applet	12/10/2021 to 14/10/2021	3	-	
	Exercise :IX	Display a message Using Applet	15/10/2021 to 18/10/2021	3	-	
	Exercise : X	Write a Java programs for using Graphics class to display basic shapes and fill them and set background and foreground colors.	19/10/2021 to 21/10/2021	3	-	Unit

	Exercise : X	Write a Java programs for using Graphics class to display basic shapes and fill them and set background and foreground colors.	22/10/2021 to 26/10/2021	4	-	
	Exercise : XI	Display a message Using Applet	27/10/2021 to 30/10/2021	4	-	
	Exercise : XI	Write a Java program to demonstrate use of I/O streams	06/11/2021 to 10/11/2021	3	-	Unit Tota

Q. ACTIVITIES:

Activity Name	Details
Test	• Aug 4th Week • Sep 2nd Week • Mid- Oct 1st Week • Oct 2nd Week • Oct 3rd Week • Nov 1st Week • Mod-Nov 2nd Week

Signature of the Staff   Signature of the HOD
Signature of the Principal

TEACHING PLAN

A. GENERAL INFORMATION

Name of the Faculty : Ms.V.Muthu sowmiya, Assistant Professor of Computer Science

Department : Computer Science

Programme : B.Sc

Programme Code :

Lecture Hours/ Practical Hours : 4Hrs / Week - Practical Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Computer organization and architecture		• To understand the principles of digital logic circuits & their design. • •To understand the working of a central processing unit architecture of a computer. • •Study basic computer organization, design and micro-operations. • •Understanding of CPU functioning and computer arithmetic. • •Learning various methods and techniques of memory organization.	• Conceptualize the basics of organizational and architectural issues of a digital computer. • Analyze processor performance improvement using instruction level parallelism. • Articulate design issues in the development of processor or other components that satisfy design requirements and objectives. • Learn various methods and techniques of memory organization. • Learn the function of each element of a memory hierarchy.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

R. PLAN OF THE WORK

the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Re
Organization ecture	I/Module - I	Introduction to basic computer and design	09/08/2021 to 12/08/2021	1	-	
	I/ Module - II	Instruction codes	13/08/2021 to 18/08/2021	4	-	
	I/ Module - III	Computer Instructions, Timing and control	19/08/2021 to 26/08/2021	3	-	
	I/ Module – IV	Execution of instruction , input / output and interrupts.	27/08/2021 to 31/08/2021	1	-	**Unit**
	II/Module - I	Central processor organization Processor – bus organization	01/09/2021 to 04/09/2021	1	-	
	II/ Module - II	Bus organization , ALU , Stack Organization, instruction format ,Addressing modes , data transfer and manipulation	06/09/2021 to 09/09/2021	4	-	
	II/ Module - III	Program control, microprocessor organization, parallel processing. Micro	11/09/2021 to 15/09/2021	3	-	
	II/ Module - IV	Program control organization, Control, memory, address.	16/09/2021 to 18/09/2021	3	-	
	II/ Module - V	sequencing , micro , program sequence , micro instruction formats	20/09/2021 to 22/09/2021	1		**Unit**
	III/Module - I	Arithmetic Processor Design	23/09/2021 to 27/09/2021	1	-	
	III/ Module – II	Comparison and subtraction of unsigned binary number	28/09/2021 to 01/10/2021	4	-	
	III/ Module - III	Addition and subtraction algorithm	02/10/2021 to 06/10/2021	3	-	
	III/ Module - IV	multiplication algorithm	07/10/2021 to 09/10/2021	3	-	
	III/ Module - V	division algorithm ,processor configuration	11/10/2021 to 13/10/2021	3	-	**Unit**
	IV/Module - I	Input – output organization	14/10/2021 to 18/10/2021	1	-	
	IV/ Module - II	Peripheral device , I/o interface , asynchronous data transfer ,	19/10/2021 to 22/10/2021	1	-	
	IV/ Module - III	Direct memory access input output processor.	23/10/2021 to 27/10/2021	4	-	
	IV/ Module - IV	priority interrupt	28/10/2021 to 30/10/2021	3	-	
	IV/ Module - V	Multiprocessor system organization.	01/11/2021 to 03/11/2021	3	-	**Unit**
	V/Module - I	Memory Volatile and non volatile memory, RAM	05/11/2021 to 09/11/2021	1	-	

V/ Module - II	ROM ,digital recording , techniques,	10/11/2021 to 13/11/2021	1	**-**	
V/ Module - III	auxiliary memory , microcomputer memory	15/11/2021 to 17/11/2021	4	**-**	
V/ Module - IV	hierarchy , associative memory .	18/11/2021 to 20/11/2021	3	**-**	
V/ Module - V	virtual memory cache memory.	22/11/2021 to 25/11/2021	1	**-**	**Unit**

H. ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

Signature of the Staff   Signature of the HOD
Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty :V.Muthu Sowmiya, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** UCS

Lecture Hours/ Practical Hours   **:**   5 Hrs / Week   - Practical Hours

B. ABOUT THE COURSE:

ne of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodol
Office Lab		• Office tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools. • Give students an in-depth understanding of why computers are essential components in business, education and society. • Provide foundational or "computer literacy" curriculum that prepares students for life-long learning of computer concepts and skills. • To acquire knowledge on editor, spread sheet and presentation software. • To train them to work on the comment based activities in MS-office system.	• To perform documentation activities • To execute accounting operations • To enhance presentation skills • To work on Document Management Systems • Format Text, Paragraphs, and sections • To Create and manage documents	• Chalk and Board • Running program systems

S. PLAN OF THE WORK

ame of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
	-	Introduction given to the students, how programs run?, Where it will be used in real time with sample programs?	09/08/2021 to 13/08/2021	5	-	-
	Exercise : I	Text Manipulation – Change the font size and type, Aligning and Justification of text, Underlining the text, indenting the text	14/08/2021 to 19/08/2021	5	-	-
	Exercise : II	Prepare a Bio-data	23/08/2021 to 26/08/2021	4	-	-
	Exercise : II	Prepare a letter	27/08/2021 to 31/08/2021	4	-	-
	Exercise : III	Using Bullets and Numbering in Paragraphs, Footer and Header, Finding and Replacing Text and Checking Spelling a)Prepare any document	01/09/2021 to 04/09/2021	4	-	-

	Exercise : III	Prepare any document in newspaper format	06/09/2021 to 09/09/2021	4	-	-
	Exercise : IV	Create a Mark sheet and find total mark, average and result	11/09/2021 to 15/09/2021	4	-	-
	Exercise : IV	Create a Mark sheet and find total mark, average and result	16/09/2021 to 18/09/2021	3	-	-
	Exercise : V	Create a calendar and Auto Format it.	20/09/2021 to 22/09/2021	3	-	-
	Exercise : VI	Picture Insertion and Alignment - Prepare a handout	23/09/2021 to 27/09/2021	4	-	-
	Exercise : VI	Prepare a business letter	28/09/2021 to 01/10/2021	4	-	-
	Exercise : VII	Prepare an invitation	02/10/2021 to 06/10/2021	4	-	-
	Exercise : VII	Usage of Formulae and Built-in Functions	07/10/2021 to 09/10/2021	3	-	-
	Exercise: VIII	Usage of Formulae and Built-in Functions	11/10/2021 to 13/10/2021	3	-	-
	Exercise : VIII	Editing Cells and Using Commands and Functions	14/10/2021 to 18/10/2021	4	-	-
	Exercise : IX	Moving and Copying, Inserting and Deleting Rows and Columns	19/10/2021 to 22/10/2021	4	-	-
	Exercise :IX	Moving and Copying, Inserting and Deleting Rows and Columns	23/10/2021 to 27/10/2021	4	-	-
	Exercise : X	Paybill Preparation	28/10/2021 to 30/10/2021	3	-	-
	Exercise : X	Paybill Preparation	01/11/2021 to 03/11/2021	3	-	
	Exercise : XI	Preparation and Manipulation of Slides	05/11/2021 to 08/11/2021	3	-	-
	Exercise : XI	Preparation and Manipulation of Slides	09/11/2021 to 11/11/2021	3	-	-

I. ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

Teaching Plan

Name of the Faculty : Mrs.C.Geetha, Assistant Professor of Computer Science

Department   **:** Computer Science / Information Technology / Computer Applications

Programme   **:** BCA

Programme Code   **:**KUE3

Lecture Hours/ Practical Hours   **:** 6 Hrs / Week   - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Mobile Computing		• To understand the basic concepts and methods of mobile communication systems. • To impart fundamental concepts in the area of mobile computing, to provide a computer systems perspective on the converging areas of wireless networking, embedded systems, and software, and to introduce selected topics of current research interest in the field. • It will provide a complete overview of the mobile computing subject area, including the latest research • In both broad and in-depth knowledge, and a critical understanding of mobile computing from different	• To explore Mobile security issues. • To integrate multimedia, camera and Location based services in Android Application • To be familiarized with Intent, Broadcast receivers and Internet services. • To learn activity creation and Android UI designing.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

		viewpoints: infrastructures, principles and theories, technologies, and applications in different domains.				

T. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Mobile Computing	I/Module - I		09.08.2021 to 08.08.2020	6	**-**	**-**
Mobile Computing	I/ Module - II		10.08.2020 to 17.08.2020	6	**-**	**-**
Mobile Computing	I/ Module - III		18.08.2020 to 21.08.2020		**-**	**-**
Mobile Computing	I/ Module – IV		24.08.2020 to 27.08.2020		**-**	**Unit I -18 hrs**
	II/Module - I		28.08.2020 to 01.09.2020		**-**	-
Mobile Computing	II/ Module - II	Stack Organization, Instruction format, Addressing Modes DTE, DCE, Interface, Modems	02.09.2020 to 05.09.2020		**-**	-
Mobile Computing	II/ Module - III	Data Transfer & Manipulation, Program Control, Microprocessor Organization Transmission Media:Guided Media, Unguided	07.09.2020 to 10.09.2020		**-**	-

		Media				
Mobile Computing	II/ Module - IV	Parallel Processing, Micro Program control organization

Multiplexing: FDM, TDM & WDM | 11.09.2020 to 14.09.2020 | | **-** | - |
| Mobile Computing | II/ Module - V | memory address, sequencing: Micro program sequence, Micro instruction formats

Multiplexing Applications | 15.09.2020 to 17.09.2020 | | | **Unit II -18 hrs** |
| Mobile Computing | III/Module - I | Arithmetic processor design: Comparison

Types of Errors, Types of Redundancy Check | 18.09.2020 to 22.09.2020 | | **-** | **-** |
| Mobile Computing | III/ Module – II | Subtraction of unsign binary number

Error Correction, Data Link Control: Line Discipline, | 23.09.2020 to 26.09.2020 | | **-** | **-** |
| Mobile Computing | III/ Module - III | Addition and Subtraction algorithm

Flow Control, Error Control, Data Link Controls: Asynchronous Protocols | 28.09.2020 to 01.10.2020 | | **-** | **-** |
| Mobile Computing | III/ Module - IV | Multiplication algorithm

Asynchronous Protocols, Synchronous Protocol | 03.10.2020 to 06.10.2020 | | **-** | **-** |
| Mobile Computing | III/ Module - V | Division Algorithm, Processor Configuration

Character Oriented | 07.10.2020 to 09.10.2020 | | **-** | **Unit III -18 hrs** |

		Protocol, Bit Oriented Protocol			-	-
Mobile Computing	IV/Module - I	Input/Output Organization : Peripheral Devices Switching: Circuit Switching, Packet Switching	10.10.2020 to 14.10.2020		-	-
Mobile Computing	IV/ Module - II	I/O Interface, Asynchronous data transfer Message Switching, Network & Interface Devices: Repeaters	15.10.2020 to 19.10.2020		-	-
Mobile Computing	IV/ Module - III	Direct Memory Access Bridges, Routers, Gateway, Other Devices. Routing Algorithm	20.10.2020 to 23.10.2020		-	-
Mobile Computing	IV/ Module - IV	Input/Output Processor , Priority Interrupt Distance Vector Algorithm, Link State Algorithms	24.10.2020 to 28.10.2020		-	-
Mobile Computing	IV/ Module - V	Multiprocessor System Organization Duties of Transport Layer, Connection, OSI Transport Protocol	29.10.2020 to 02.11.2020		-	**Unit IV -18 hrs**
Mobile Computing	V/Module - I	Introduction of Memory and its types Ethernet Technolgoes, Wireless LAN	03.11.2020 to 05.11.2020		-	-
Mobile Computing	V/ Module - II	Volatile and Non volatile memory Wireless LAN: Applications, Requirements, Planning, Architecture	06.11.2020 to 09.11.2020		-	-
Mobile Computing	V/ Module - III	RAM, ROM, Digital	10.11.2020		-	-

		Recording Techniques IEEE 802.11, WAP Services, Network Management	to 12.11.2020			
Mobile Computing	V/ Module - IV	Auxiliary memory, Micro computer memory Goal of Network Management, Standards	16.11.2020 to 18.11.2020		**-**	**-**
Mobile Computing	V/ Module - V	Hierarchies of memory, Associative memory Network Management Model	19.11.2020 to 21.11.2020		**-**	**-**
Mobile Computing	V/ Module - VI	Virtual memory, cache memory Simple Network Management Protocol	23.11.2020 to 25.11.2020		**-**	**Unit V -18 hrs** **Total-90 hrs**

U. ACTIVITIES

Activity Name	Details
Test	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Mid- Sep 4th Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week

	• Mod-Nov 1st Week
Assignment	• Unit I- Aug 2nd Week • Unit II- Sep 3rd Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Oct 4th Week
Quiz	Quiz during November 2nd week for Unit 1 to Unit 5
Seminar	During November 2nd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD

Signature of the Principal

TEACHING PLAN

Name of the Faculty : Mrs.C.Geetha, Assistant Professor of Computer Science

Department **:** Computer Science / Information Technology / Computer Applications

Programme **:** M.Sc.,CS

Programme Code **:** PGXD

Lecture Hours/ Practical Hours **:** 5 Hrs / Week   - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Advanced Java programming		• To learn why Java is useful for the design of desktop and web applications. • To learn how to implement object-oriented designs with Java. • To identify Java language components and how they work together in applications.	• Understand the fundamental concepts of the J2EE Technologies • Comprehend the principles of J2EE programming. • Learn the communication of client and server in the programming paradigm. • Understand the concept of JSP and EJB	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion

		• To design and program stand-alone Java applications. • To understand how to use Java APIs for program development	• Ability to connect Spring with XML • Develop programming skills in Spring using web views	• Individual projects • Lecturing • Textbook assignments • Swayam videos

V. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Advanced Java programming	I/Module - I	**J2EE OVERVIEW:** J2EE and J2SE- The Birth of J2EE - J2EE.	09.08.2021 to 08.08.2020	6	-	-
Advanced Java programming	I/ Module - II	**J2EE Multitier Architecture:** The Tier - J2EE Multi-Tier Architecture	10.08.2020 to 17.08.2020	6	-	-
Advanced Java programming	I/ Module - III	Client Tier Implementation-Classification of Clients -Web Tier Implementation	18.08.2020 to 21.08.2020		-	-
Advanced Java programming	I/ Module – IV	**J2 EE Best Practices:** The Enterprise Application-Session Management- Presentation and Processing- Model View Controller.	24.08.2020 to 27.08.2020		-	**Unit I -15 hrs**
Advanced Java programming	II/Module - I	JAVA REMOTE METHOD INVOCATION :RMI Concept-Remote Interface- Passing Objects	28.08.2020 to 01.09.2020		-	-

Advanced Java programming	II/ Module - II	- The RMI Process - Sever side - Client side.	02.09.2020 to 05.09.2020		-	-
Advanced Java programming	II/ Module - III	**JAVA Servlets:** Java Servlets and Common Gateway Interface Programming	07.09.2020 to 10.09.2020		-	-
Advanced Java programming	II/ Module - IV	- Benefits of using a Java Servlet – A simple Java Servlet – Anatomy of Java Servlet	11.09.2020 to 14.09.2020		-	-
Advanced Java programming	II/ Module - V	Deployment Descriptor – Reading Data from a Client – Working with Cookies	15.09.2020 to 17.09.2020			**Unit II -15 hrs**
Advanced Java programming	III/Module - I	Tracking Sessions	18.09.2020 to 22.09.2020		-	-
Advanced Java programming	III/ Module – II	JSP - JSP Tags- Variables and Objects- Methods	23.09.2020 to 26.09.2020		-	-
Advanced Java programming	III/ Module - III	Control Statements- Loops -Tomcat- Request String	28.09.2020 to 01.10.2020		-	-
Advanced Java programming	III/ Module - IV	User Session - Cookies - Session Objects	03.10.2020 to 06.10.2020		-	-
Advanced Java programming	III/ Module - V	**EJB:** Enterprise Java Beans-The EJB container- EJB Classes	07.10.2020 to 09.10.2020		-	**Unit III -15 hrs**
Advanced Java programming	IV/Module - I	EJB Interfaces- Referencing EJB- Relationship Elements -Session Java Bean	10.10.2020 to 14.10.2020		-	-
Advanced Java programming	IV/ Module - II	Stateless vs. Stateful - Creating a Session Java Bean-Entity Java Bean	15.10.2020 to 19.10.2020		-	-
Advanced Java programming	IV/ Module - III	The JAR file	20.10.2020 to 23.10.2020		-	-
Advanced Java programming	IV/ Module - IV	INTRODUCTION TO SPRING Simplifying Java Development	24.10.2020 to 28.10.2020		-	-

		– Containing Beans				
Advanced Java programming	IV/ Module - V	Surveying Bean Landscape	29.10.2020 to 02.11.2020		-	**Unit IV -15 hrs**
Advanced Java programming	V/Module - I	Spring Configuration	03.11.2020 to 05.11.2020		-	-
Advanced Java programming	V/ Module - II	Wiring Beans – With Java – With XML	06.11.2020 to 09.11.2020		-	-
Advanced Java programming	V/ Module - III	SPRING ON THE WEB Spring MVC	10.11.2020 to 12.11.2020		-	-
Advanced Java programming	V/ Module - IV	Simple Controller – Request Input	16.11.2020 to 18.11.2020		-	-
Advanced Java programming	V/ Module - V	Processing Forms. WEB VIEWS: Creating JSP Web Views – Defining Layout	19.11.2020 to 21.11.2020		-	-
Advanced Java programming	V/ Module - VI	JSP Libraries	23.11.2020 to 25.11.2020		-	**Unit V -15 hrs** **Total-90 hrs**

W. ACTIVITIES

Activity Name	Details
Test	• Unit I- Aug 3rd Week • Unit II- Sep 1st Week • Mid- Sep 4th Week • Unit III- Oct 1st Week • Unit IV- Oct 2nd Week • Unit V- Oct 4th Week • Mod-Nov 1st Week
Assignment	• Unit I- Aug 2nd Week • Unit II- Sep 3rd Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Oct 4th Week

Quiz	Quiz during November 2nd week for Unit 1 to Unit 5
Seminar	During November 2nd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD

                              Signature of the Principal

TEACHING PLAN

Name of the Faculty : Mrs.K.Devi, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** BCS

Lecture Hours/ Practical Hours   **:** 5 Hrs / Week - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Data Structures and Algorithm		• To impart the basic concepts of data structures and algorithms • To understand concepts about searching and sorting techniques • To Understand basic concepts about stacks,queues,lists,trees and graphs	• Learn the fundamental Concepts of Data Structures • Understand the working principles of Linked List, Stack, Queue and Trees. • Determine the applications of Linked List, Stack, Queue and Trees. • Grasp various operations and searching methods applied	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects

<table>
<tr><td colspan="2"></td><td rowspan="2">• To understanding about writing algorithms and step by step approach in solving problems with the help of fundamental data structures</td><td>using Binary Tree.</td><td rowspan="2">• Lecturing
• Textbook assignments
• Swayam videos</td></tr>
<tr><td colspan="2"></td><td>• Demonstrate understanding of various sorting algorithms, including insertion sort, selection sort, merge sort, heap sort and quick sort.
• Comprehend various Algorithm Design Strategies.</td></tr>
<tr><td colspan="2"></td><td>• To Solve problems based upon different data structure & also write programs</td><td></td><td></td></tr>
</table>

X. PLAN OF THE WORK

the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Re
uctures and orithm	I/Module - I	Introduction , Basic Terminology	09/08/2021 to 12/08/2021	2	-	
uctures and orithm	I/ Module - II	Elementary Data Organization , Data Structures	13/08/2021 to 18/08/2021	3	-	
uctures and orithm	I/ Module - III	Data Structure Operations, **Arrays,** Linear Arrays Representation, Traversing	19/08/2021 to 26/08/2021	1	-	
uctures and orithm	I/ Module – IV	Insertion and Deletion, Linear Search, Binary Search.	27/08/2021 to 31/08/2021	3	-	**Unit**
uctures and orithm	II/Module - I	Introduction , Linked Lists	01/09/2021 to 04/09/2021	3	-	
uctures and orithm	II/ Module - II	Representation of Linked List in Memory	06/09/2021 to 09/09/2021	2	-	
uctures and orithm	II/ Module - III	Traversing a Linked List, Searching a Linked List	11/09/2021 to 15/09/2021	3	-	
uctures and orithm	II/ Module - IV	Memory Allocation, Garbage Collection	16/09/2021 to 18/09/2021	1	-	
uctures and orithm	II/ Module - V	Insertion into a Linked, Deletion from a Linked List	20/09/2021 to 22/09/2021	3		**Unit**
uctures and orithm	III/Module - I	Introduction - Stacks – Array Representations of Stacks	23/09/2021 to 27/09/2021	3	-	
uctures and orithm	III/ Module – II	Arithmetic Expressions, Polish Notation	28/09/2021 to 01/10/2021	2	-	
uctures and orithm	III/ Module - III	**Recursion,** Factorial Function, Fibonacci Sequence	02/10/2021 to 06/10/2021	3	-	
uctures and orithm	III/ Module - IV	**QUEUES:** Representation of Queues,	07/10/2021 to 09/10/2021	1	-	
uctures and orithm	III/ Module - V	Array Representation of Queues	11/10/2021 to 13/10/2021	3	-	**Unit**
uctures and orithm	IV/Module - I	Introduction : Binary Trees	14/10/2021 to 18/10/2021	3	-	
uctures and orithm	IV/ Module - II	Representing Binary Tress in Memory	19/10/2021 to 22/10/2021	2	-	

uctures and orithm	IV/ Module - III	Traversing Binary Trees, Binary Search,	23/10/2021 to 27/10/2021	3	-	
ures and	IV/ Module - IV	Searching and Inserting in Binary Search Trees, Deleting in Binary Search Trees	28/10/2021 to 30/10/2021	1	-	
ures and	IV/ Module - V	**SORTING:** Insertion Sort, Selection Sort, Merge Sort, Heap Sort ,Quick Sort.	01/11/2021 to 03/11/2021	3	-	**Unit**
ures and	V/Module - I	Algorithms , Basic Steps	05/11/2021 to 09/11/2021	3	-	
ures and	V/ Module - II	Algorithm Design Methods,Sub goals	10/11/2021 to 13/11/2021	2	-	
ures and	V/ Module - III	Hill Climbing and Working Backward	15/11/2021 to 17/11/2021	3	-	
ures and	V/ Module - IV	Heuristics, Backtrack Programming.	18/11/2021 to 20/11/2021	1	-	
ures and	V/ Module - V	Branch and Bound.	22/11/2021 to 25/11/2021	3	-	**Unit**

Y. ACTIVITIES

Activity Name	Details
Test	- Unit I- Aug 4th Week - Unit II- Sep 2nd Week - Mid- Oct 1st Week - Unit III- Oct 2nd Week - Unit IV- Oct 3rd Week - Unit V- Nov 1st Week - Mod-Nov 2nd Week
Assignment	- Unit I- Aug 3rd Week - Unit II- Sep 4th Week - Unit III- Oct 3rd Week - Unit IV- Oct 4th Week - Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD

Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Mrs. K. Devi , Assistant Professor of Computer Science

Department : Computer Science

Programme : M.Sc

Programme Code : PCS

Name of the Paper : Distributed Technology

Lecture Hours/ Practical Hours : 5 hrs /week – Lecture Hours

B. <u>ABOUT THE COURSE:</u>

e of the urse	Course Code	Course Objectives	Course Outcomes	Teachin Methodolo
		- This course aims to build concepts regarding the fundamental principles of distributed systems. - The design issues and distributed operating system concepts are covered. - To learn the principles, architectures, algorithms and programming models used in - distributed systems. - To examine state-of-the-art distributed systems, such as Google File System. - To design and implement sample distributed systems.	- After completion of the course the student will be able to use the features of Dot Net Framework along with the features of C#. - Build well-formed XML Document and implement Web Service using Java. - Students will identify the core concepts of distributed systems: the way in which several machines orchestrate to correctly solve problems in an efficient, reliable and scalable way. - Students will examine how existing systems have applied the concepts of distributed systems in designing large systems, and will additionally apply these concepts to develop sample systems.	- Black Board - PowerPoint Presentation - E-Content - OHP - Flipped Class (High Tech) - NPTEL Vide - Class projects - Classroom discussion - Group discuss - Individual pro - Lecturing - Textbook assignments - Swayam vide

C. <u>PLAN OF THE WORK:</u>

of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	R
d Technology	I/Module - I	Challenges involved in establishing remote connection	09/08/2021 to 12/08/2021	1	-	
ed Technology	I/ Module - II	Strategies involved in remote computation	13/08/2021 to 16/08/2021	2	-	
ed Technology	I/ Module - III	Current Distributed computing practices through Dot Net and	17/08/2021 to 23/08/2021	5	-	
ed Technology	I/ Module - IV	Java technologies	24/08/2021 to 27/08/2021	4	-	Unit
ed Technology	II/Module - I	Disconnected Data Access	28/08/2021 to 01/09/2021	5	-	
ed Technology	II/ Module - II	Grid view, Details View	02/09/2021 to 04/09/2021	1	-	
ed Technology	II/ Module - III	Form View controls, Crystal Reports	06/09/2021 to 08/09/2021	1	-	

ed Technology	II/ Module - IV	Role of ADO	09/09/2021 to 13/09/2021	2	-	-
ed Technology	II/ Module - V	NET in Distributed Applications	14/09/2021 to 16/09/2021	5		Unit
ed Technology	III/Module - I	Ad Rotator, Multi view,	17/09/2021 to 20/09/2021	4	-	
ed Technology	III/ Module - II	Wizard and Image Map Controls	21/09/2021 to 23/09/2021	5	-	
ed Technology	III/ Module - III	Master Pages – Site Navigation	24/09/2021 to 27/09/2021	1	-	
ed Technology	III/ Module - IV	Web Parts , Uses of these control	28/09/2021 to 30/09/2021	1	-	
ed Technology	III/ Module - V	Features in Website development.	01/10/2021 to 04/10/2021	2	-	Unit
ed Technology	IV/Module - I	Security in ASP	05/10/2021 to 07/10/2021	5	-	
ed Technology	IV/ Module - II	NET – State Management in ASP	08/10/2021 to 11/10/2021	4	-	
ed Technology	IV/ Module - III	NET , Mobile Application development in ASP	12/10/2021 to 14/10/2021	5	-	
ed Technology	IV/ Module - IV	Critical usage of these features in Website development.	15/10/2021 to 18/10/2021	1	-	
ed Technology	IV/ Module - V	Advanced Features Of Asp.Net	19/10/2021 to 21/10/2021	1	-	Unit
ed Technology	V/Module - I	Role of Web services in Distributed Computing	22/10/2021 to 26/10/2021	2	-	
ed Technology	V/ Module - II	WSDL, UDDI, SOAP concepts involved in Web Services	27/10/2021 to 30/10/2021	5	-	
ed Technology	V/ Module - III	Connected a Web Service to a Data Base	01/11/2021 to 05/11/2021	4	-	
ed Technology	V/ Module - IV	Accessing a Web Service through n ASP, NET application.	06/11/2021 to 10/11/2021	5	-	Unit

Z. ACTIVITIES:

Activity Name	Details
Test	- Unit I- Aug 4th Week - Unit II- Sep 2nd Week - Mid- Oct 1st Week - Unit III- Oct 2nd Week - Unit IV- Oct 3rd Week - Unit V- Nov 1st Week - Mod-Nov 2nd Week
Assignment	- Unit I- Aug 3rd Week - Unit II- Sep 4th Week - Unit III- Oct 3rd Week - Unit IV- Oct 4th Week - Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from

	Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD
Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Mrs. K. Devi , Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.Sc

Programme Code   **:** BCS

Lecture Hours/ Practical Hours   **:**   4 Hrs / Week - Practical Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodol
		• To understand basic data structures such as arrays, linked lists, stacks and queues • Know about the basic concepts of Function, Array and Link-list. • Understand how several fundamental algorithms work particularly those concerned with Stack, Queues, Trees and various Sorting algorithms. • Understand how work the graphs, trees and heaps function • Design new algorithms or modify existing ones for new applications and able to analyze the space & time efficiency of most	• Describe the hash function and concepts of collision and its resolution methods • Solve problem involving graphs, trees and heaps • Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data. • To analyze the problems to apply suitable algorithm and data structure. • To use appropriate algorithmic strategy for better efficiency.	• Chalk and Board • Running program systems

algorithms.

AA. PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Data Structures Using C++ Lab	-	Introduction given to the students, how programs run?	09/08/2021 to 13/08/2021	-	**4,5**	**-**
Data Structures Using C++ Lab	Exercise : I	Merging two arrays into a single array.	14/08/2021 to 19/08/2021	-	**2,3**	**-**
Data Structures Using C++ Lab	Exercise : I	To find the following in a matrix: Row Sum	23/08/2021 to 26/08/2021	-	**4,5**	**-**
Data Structures Using C++ Lab	Exercise : II	To find the following in a matrix: Column Sum	27/08/2021 to 31/08/2021	-	**2,3**	**-**
Data Structures Using C++ Lab	Exercise : II	Sum of all the elements	01/09/2021 to 04/09/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : III	Matrix Addition	06/09/2021 to 09/09/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise : IV	Multiplication operations	11/09/2021 to 15/09/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : IV	Multiplication operations	16/09/2021 to 18/09/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise : V	To find an element using Sequential and binary search	20/09/2021 to 22/09/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : VI	To find an element using Sequential and binary search	23/09/2021 to 27/09/2021	-	**2,3**	**-**
Data Structures Using C++ Lab	Exercise : VI	i. Bubble sort	28/09/2021 to 01/10/2021	-	**4,5**	**-**
Data Structures Using C++ Lab	Exercise : VII	ii. Insertion sort	02/10/2021 to 06/10/2021	-	**2,3**	**-**
Data Structures Using C++ Lab	Exercise : VII	iii. Selection sort	07/10/2021 to	-	**4,5**	**-**

Data Structures Using C++ Lab			09/10/2021			
Data Structures Using C++ Lab	Exercise: VIII	To find the Factorial of a number using Recursion	11/10/2021 to 13/10/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : VIII	To find the Factorial of a number using Recursion	14/10/2021 to 18/10/2021	-	**2,3**	-
Data Structures Using C++ Lab	-	Heap Sort	19/10/2021 to 22/10/2021	-	**4,5**	-
Data Structures Using C++ Lab	-	Heap Sort	23/10/2021 to 27/10/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise : IX	To PUSH and POP an element from STACK	28/10/2021 to 30/10/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise :IX	To PUSH and POP an element from STACK	01/11/2021 to 03/11/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise : X	To Insert and Delete an element from QUEUE.	05/11/2021 to 08/11/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : X	To Insert and Delete an element from QUEUE.	09/11/2021 to 11/11/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise : XI	To insert and delete a node in a linked list.	12/11/2021 to 15/11/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : XI	To insert and delete a node in a linked list.	16/11/2021 to 18/11/2021	-	**2,3**	-
Data Structures Using C++ Lab	Exercise :XII	Program to traverse a binary tree	19/11/2021 to 22/11/2021	-	**4,5**	-
Data Structures Using C++ Lab	Exercise : XII	Program to traverse a binary tree	23/11/2021 to 25/11/2021	-	**2,3**	-

J. ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

Signature of the Staff   Signature of the HOD

Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Mrs. K. Devi , Assistant Professor of Computer Science

Department : Computer Application

Programme : B.C.A

Programme Code : UCA

Lecture Hours/ Practical Hours : 4 Hrs / Week - Practical Hours

B. <u>ABOUT THE COURSE:</u>

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Method
		• Describe Android platform, Architecture and features. • Understanding of the real-time embedded and mobile systems, and the techniques essential to the design and implementation of mobile applications. • Understand the various parts of an Android Project. • Use the Android Emulator. • Install and run the application on a physical device. • Create a simple User Interface.	• Use Intent , Broadcast receivers and Internet services in Android App. • Design and implement Database Application and Content providers. • Use multimedia, camera and Location based services in Android App. • Discuss various security issues in Android platform	• Chalk and Board • Running program systems

BB.   PLAN OF THE WORK

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
ANDROID LAB	-	Introduction given to the students, how programs run?	09/08/2021 to 13/08/2021	-	4, 5	-
ANDROID LAB	Exercise : I	Different Layout design including nested layout for a single bio data.	14/08/2021 to 19/08/2021	-	4, 5	-
ANDROID LAB	Exercise : I	Different Layout design including nested layout for a single bio data.	23/08/2021 to 26/08/2021	-	4, 5	-
ANDROID LAB	Exercise : II	Arithmetic Operation for two numbers	27/08/2021 to	-	4, 5	-

			31/08/2021			
NDROID LAB	Exercise : II	Arithmetic Operation for two numbers	01/09/2021 to 04/09/2021	-	**4, 5**	-
NDROID LAB	Exercise : III	Business Calculator	06/09/2021 to 09/09/2021	-	**4, 5**	-
NDROID LAB	Exercise : III	Business Calculator	11/09/2021 to 15/09/2021	-	**4, 5**	-
NDROID LAB	Exercise : IV	Animation: Bouncing of a ball	16/09/2021 to 18/09/2021	-	**4, 5**	-
NDROID LAB	Exercise : IV	Animation: Bouncing of a ball	20/09/2021 to 22/09/2021	-	**4, 5**	-
NDROID LAB	Exercise : V	Intent	23/09/2021 to 27/09/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : V	Intent	28/09/2021 to 01/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : VI	Database SQL : Student Bio data	02/10/2021 to 06/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : VI	Database SQL: Student Bio data	07/10/2021 to 09/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise: VII	Fragments	11/10/2021 to 13/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : VII	Fragments	14/10/2021 to 18/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : VIII	Media Player	19/10/2021 to 22/10/2021	-	**4, 5**	**-**
NDROID LAB	Exercise : VIII	Media Player	23/10/2021 to 27/10/2021	-	**4, 5**	

K. ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

Signature of the Staff   Signature of the HOD
Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : Mrs. K. Devi , Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** M.Sc

Programme Code   **:** PCS

Name of the Paper   **:** Artificial Intelligence

Lecture Hours/ Practical Hours   **:** 5 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

of the urse	Course Code	Course Objectives	Course Outcomes	Teachin Methodol
icial gence	MXE1	• On Successful completion of the course the students should have: understood the AI & Expert Systems - Learnt the Heuristic techniques and reasoning. • An ability to apply knowledge of computing and mathematics appropriate to the discipline. • An ability to analyze a problem and identify and define the computing requirements appropriate to its solution. • An ability to use current techniques, skills, and tools	• To understand the basics of Artificial Intelligence , Intelligent Agents and its structure • To understand the problem solving by various searching techniques • To understand the concept of informed search and Exploration • To understand the concept of constraint satisfaction Problems and Adversarial Search • To Understand what is Reasoning and Knowledge Representation • To understand the concept of Reasoning with Uncertainty &	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classr (High Tech) • NPTEL Video • Class projects • Classroom dis • Group discuss • Individual pro • Lecturing • Textbook assi

| | | | necessary for computing practice. | Probabilistic Reasoning | • Swayam video |
| | | | • An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs. | • To Understand the basic forms of Machine Learning, decision trees and statistical Learning | |

C. PLAN OF THE WORK:

of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	R
l Intelligence	I/Module - I	AI Problems: Underlying Assumptions	09/08/2021 to 12/08/2021	5	-	
l Intelligence	I/ Module - II	Al Techniques, Tic-Tac-Toe, Criteria for Success Problems,	13/08/2021 to 16/08/2021	3	-	
l Intelligence	I/ Module - III	Problem Spaces and Search, Defining a problem as a State space search	17/08/2021 to 23/08/2021	1	-	
l Intelligence	I/ Module - IV	Production Systems: Control Strategies – Heuristics.	24/08/2021 to 27/08/2021	1	-	Unit
l Intelligence	II/Module - I	Generate and Test - Hill Climbing	28/08/2021 to 01/09/2021	5	-	
l Intelligence	II/ Module - II	Best-First, Means-end analysis. Knowledge representation issues	02/09/2021 to 04/09/2021	3	-	
l Intelligence	II/ Module - III	Representations and mappings -Approaches to Knowledge representations	06/09/2021 to 08/09/2021	1	-	
l Intelligence	II/ Module - IV	Issues in Knowledge representations - Frame Problem.	09/09/2021 to 13/09/2021	1	-	
l Intelligence	II/ Module - V	Representing simple facts in logic	14/09/2021 to 16/09/2021	5		Unit
l Intelligence	III/Module - I	Representing Instance and Is a relationships	17/09/2021 to 20/09/2021	3	-	
l Intelligence	III/ Module - II	Computable functions and predicates	21/09/2021 to 23/09/2021	1	-	
l Intelligence	III/ Module - III	The basis of resolution, Resolution in propositional logic-Unification algorithm	24/09/2021 to 27/09/2021	1	-	
l Intelligence	III/ Module - IV	Resolution in Predicate logic-Need to try several substitutions	28/09/2021 to 30/09/2021	5	-	
l Intelligence	III/ Module - V	Procedural Vs Declarative knowledge – Logic Programming	01/10/2021 to 04/10/2021	3	-	Unit
l Intelligence	IV/Module - I	Forward Vs Backward Reasoning:Backward	05/10/2021 to 07/10/2021	1	-	
l Intelligence	IV/ Module - II	Chaining Rule systems-Forward –Chaining Rule Systems	08/10/2021 to 11/10/2021	1	-	
l Intelligence	IV/ Module - III	-Combining Forward and Backward reasoning	12/10/2021 to 14/10/2021	5	-	

l Intelligence	IV/ Module - IV	Matching :Indexing-Matching with variables-Complex	15/10/2021 to 18/10/2021	3	-	
l Intelligence	IV/ Module - V	Approximate matching-conflict matching – Control knowledge.	19/10/2021 to 21/10/2021	1	-	Unit
l Intelligence	V/Module - I	The mini max search procedure. Expert System: Representing and using Domain Knowledge– Expert system shells	22/10/2021 to 26/10/2021	1	-	
l Intelligence	V/ Module - II	Perception and Action: Real time Search	27/10/2021 to 30/10/2021	5	-	
l Intelligence	V/ Module - III	Perception–Vision-Speech Recognition	01/11/2021 to 05/11/2021	3	-	
l Intelligence	V/ Module - IV	Action-Navigation-Manipulation-Robot Architectures.	06/11/2021 to 10/11/2021	1	-	Unit

CC.   **ACTIVITIES:**

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week • Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Nov 1st Week • Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week • Unit II- Sep 4th Week • Unit III- Oct 3rd Week • Unit IV- Oct 4th Week • Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   Signature of the HOD
Signature of the Principal

Teaching Plan

Name of the Faculty :R.AGILA DEVI, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.C.A

Programme Code : CORE COURSE - XI

Name of the Paper : Operating System

Lecture Hours/ Practical Hours : 6 Hrs / Week - Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Operating Systems	CORE COURSE - XI	➢ To gain the basic knowledge about the operating systems and its various schemes and services. ➢ To make students able to learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system. ➢ To provide students knowledge of memory management and deadlock handling algorithms ➢ At the end of the course, students will be able to implementvarious algorithms required for management, scheduling, allocation and communication used in operating system.	On completion of the Course, Students should be able to do ➢ Understand the basic concept of Computer System and Operating System Structure ➢ Gain Knowledge of the fundamental aspects of process and processor managements with deadlocks and CPU scheduling ➢ Introduce memory and virtual memory techniques ➢ Understand files, directories and its accessing methods and its structures ➢ Ability to know mass storage devices and its scheduling ➢ Understand the security on the operating system and protection mechanisms. .	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

DD. PLAN OF THE WORK

the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Re
Systems	I/Module - I	Meaning of OS – Early Systems – Multiprogrammed Batch Systems- Real-Time Systems.	09/08/2021 to 12/08/2021	4	-	
Systems	I/ Module - II	Computer System Structures: Computer-System Operation - Storage Hierarchy - General System Architecture	13/08/2021 to 17/08/2021	5	-	
Systems	I/ Module - III	Operating System Structures: System Components - System Calls	18/08/2021 to 23/08/2021	5	-	
Systems	I/ Module – IV	Virtual Machines - System Generation.-Structure with example	24/08/2021 to 27/08/2021	4	-	**Unit**
Systems	II/Module - I	Process Management-Processes - Process	31/08/2021 to	4	-	

		Concept - Operation on Processes - Inter-Process Communication.	03/09/2021			
systems	II/ Module - II	CPU Scheduling: Basic Concepts - Scheduling Algorithms - Real Time Scheduling	04/09/2021 to 08/09/2021	4	-	
systems	II/ Module - III	Process Synchronization: Background - Critical-Selection Problem –Semaphores	9/09/2021 to 15/09/2021	4	-	
systems	II/ Module - IV	Deadlocks: System Model - Methods for Handling Deadlocks	16/09/2021 to 18/09/2021	3	-	
systems	II/ Module - V	Deadlock Avoidance - Recovery from Deadlock with Example	20/09/2021 to 22/09/2021	3		**Unit**
systems	III/Module - I	Memory Management-Memory-Background – Swapping with Example	25/09/2021 to 29/09/2021	4	-	
systems	III/ Module – II	Paging - Segmentation with Paging-types With example	30/09/2021 to 05/10/2021	4	-	
systems	III/ Module - III	Virtual Memory: Demand Paging With example	6/10/2021 to 08/10/2021	4	-	
systems	III/ Module - IV	Page Replacement – Types Of Page Replacement with Example	11/10/2021 to 13/10/2021	3	-	
systems	III/ Module - V	Allocation of Frames – Thrashing.	18/10/2021 to 20/10/2021	3	-	**Unit I**
systems	IV/Module - I	File Concept - Access Methods – Directory Structures	21/10/2021 to 25/10/2021	4	-	
systems	IV/ Module - II	File-System Implementation: File-system Structure – Allocation Methods	26/10/2021 to 29/10/2021	4	-	
systems	IV/ Module - III	Directory Implementation - Efficiency and Performance - Recovery	30/10/2021 to 2/10/2021	4	-	
systems	IV/ Module - IV	Mass Storage Structure: Disk Structure - Disk Scheduling	8/11/2021 to 10/11/2021	3	-	
systems	IV/ Module - V	Swap-Space Management - Stable-Storage Implementation	16/11/2021 to 18/11/2021	3	-	**Unit I**
systems	V/Module - I	Goals of Protection - Access Matrix - Capability Based Systems - Language-based Protection	19/11/2021 to 23/11/2021	4	-	
systems	V/ Module - II	Security: The Security Problem - Authentication - Security Systems and Facilities - Encryption.	25/11/2021 to 30/11/2021	4	-	
systems	V/ Module - III	Distributed Systems: Distributed System Structures: Background – Distribution Coordination:	01/12/2021 to 8/11/2021	3	-	
systems	V/ Module - IV	Mutual Exclusion- Atomicity – Concurrency Control	09/11/2021 to 13/11/2021	3	-	
systems	V/ Module - V	Deadlock Handling- Election Algorithms.	15/12/2021 to 20/12/2021	4	-	**Unit**

EE. ACTIVITIES

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week

	• Unit III- Oct 2nd Week
	• Unit IV- Oct 3rd Week
	• Unit V- Nov 1st Week
	• Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week
	• Unit II- Sep 4th Week
	• Unit III- Oct 3rd Week
	• Unit IV- Oct 4th Week
	• Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   **Signature of the HOD**
                                                        Signature of the Principal

TEACHING PLAN

A.GENERAL INFORMATION

Name of the Faculty : R.AGILA DEVI, Assistant Professor of Computer Science

Department   **:** Computer Science

Programme   **:** B.C.A

Programme Code   **:** KUA

Name of the Paper   : C Programming

Lecture Hours/ Practical Hours   **:** 5 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
PROGRAMMING	KUA	➢ To obtain knowledge about the structure of the programming language C ➢ To develop the program writing and logical thinking skill**.** ➢ To impart the knowledge about pointers which is the backbone of effective memory handling ➢ To study the advantages of user defined data type which provides flexibility for application development	On completion of the course the learner will be able to ➢ Understand the basic terminology algorithm, flowchart and g awareness used in compu programming. ➢ Design programs involving various concepts like decis structures, loops, functions of language. ➢ Demonstrate the single, mu dimensional arrays, String functi and user defined functions.	➢ Black Board ➢ PowerPoint Present ➢ E-Content ➢ OHP ➢ Flipped Classrooms (High Tech) ➢ NPTEL Video ➢ Class projects ➢ Classroom discussio ➢ Group discussion

		> To teach the basics of preprocessors available with C compiler.	> Compare the structure and union C and apply it to construct array structures and structure function. > Understand the dynamics memory by the use of pointers a pointers with functions.	> Individual projects > Lecturing > Textbook assignme > Swayam videos

C. <u>PLAN OF THE WORK:</u>

f the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	R
RAMMING	I/Module - I	Introduction to computer basics, basic terminology of computer, Define algorithm With Example and Flowchart	09/08/2021 to 12/08/2021	4	-	
amming	I/ Module - II	Simple Model of a Computer ,Characteristics of Computers and -Problem Solving Using Computers	13/08/2021 to 16/08/2021	3	-	
amming	I/ Module - III	Introduction to C-Identifiers, Keywords, Constants, Variables and data types	17/08/2021 to 23/08/2021	4	-	
amming	I/ Module - IV	Access Modifiers, Data Type Conversions-Operators-Types, Conditional Controls - Loop Controls.	24/08/2021 to 27/08/2021	4	-	Unit
amming	II/Module - I	Arrays:–Types of Array- Character Arrays and Strings.	28/08/2021 to 01/09/2021	4	-	
amming	II/ Module - II	Function: Introduction - Elements of User Defined Function - Definition of Functions - Return Values and their Types	02/09/2021 to 04/09/2021	3	-	
amming	II/ Module - III	Function Calls - Function Declaration - Category of Function - Nesting of Function - Recursion	06/09/2021 to 08/09/2021	3	-	
amming	II/ Module - IV	Passing Arrays to Function - Passing Strings to Function	09/09/2021 to 13/09/2021	3	-	-
amming	II/ Module - V	The Scope, Visibility and Lifetime of Variables - Library functions.	14/09/2021 to 16/09/2021	3		Unit
amming	III/Module - I	Defining Structure - Declaring Structure Variable	17/09/2021 to 20/09/2021	3	-	
amming	III/ Module - II	Accessing Structure Members - Structure Initialization	21/09/2021 to 23/09/2021	3	-	

mming	III/ Module - III	Arrays of Structure - Arrays within Structures	24/09/2021 to 27/09/2021	3	-	
mming	III/ Module - IV	Structures within Structure	28/09/2021 to 30/09/2021	3	-	
mming	III/ Module - V	Structures and Function - Union.	01/10/2021 to 04/10/2021	3	-	Unit
mming	IV/Module - I	Pointers - Declaration of Pointers - Accessing Variables through Pointers	05/10/2021 to 07/10/2021	3	-	
mming	IV/ Module - II	Chain of Pointers - Pointer Expressions- Pointer Increments	08/10/2021 to 11/10/2021	3	-	
mming	IV/ Module - III	Pointers with Arrays and Strings	12/10/2021 to 14/10/2021	3	-	
mming	IV/ Module - IV	Pointers with Functions - Pointers with Structures.	15/10/2021 to 18/10/2021	3	-	
mming	IV/ Module - V	Array of Pointers with Examples	19/10/2021 to 21/10/2021	3	-	Unit
mming	V/Module - I	Defining and Opening a File - Closing a File - Input / Output Operations on Files	22/10/2021 to 26/10/2021	4	-	
mming	V/ Module - II	Error Handling During I/O Operations	27/10/2021 to 30/10/2021	4	-	
mming	V/ Module - III	Random Access to Files - Command Line Arguments	01/11/2021 to 05/11/2021	4	-	
mming	V/ Module - IV	Dynamic Memory Allocation.-Types of Memory Allocation	06/11/2021 to 10/11/2021	3	-	Unit Tot

FF.ACTIVITIES:

Activity Name	Details
Test	- Unit I- Aug 4th Week - Unit II- Sep 2nd Week - Mid- Oct 1st Week - Unit III- Oct 2nd Week - Unit IV- Oct 3rd Week - Unit V- Nov 1st Week - Mod-Nov 2nd Week
Assignment	- Unit I- Aug 3rd Week - Unit II- Sep 4th Week - Unit III- Oct 3rd Week - Unit IV- Oct 4th Week - Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

Signature of the Staff   **Signature of the HOD**
Signature of the Principal

TEACHING PLAN

A. GENERAL INFORMATION

Name of the Faculty : R.AGILA DEVI, Assistant Professor of Computer Science

Department : Computer Applications

Programme : B.C.A

Programme Code : KUBY

Name of the Paper : Programming In C Lab

Lecture Hours/ Practical Hours : 3 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Programming In C Lab	KUBY	➢To develop skills in implementing algorithms through the programming Language C ➢To explore the features of C by applying sample problems. ➢The students will be able to enhance their analyzing and problem solving skills ➢To learn problem solving techniques. ➢To teach the student to write programs in C and to solve the problems.	On completion of the course the learner will be able to ➢ Understanding a functional hierarchicalcode organization. ➢ Ability to define and manage data structures based on problem subject domain. ➢ Ability to work with textual information, characters and strings. ➢ Ability to work with arrays of complex objects. ➢ Understanding a concept of object thinking within the framework of functional model.	• Black Board • PowerPoint Presentation • E-Content • OHP • Flipped Classrooms (High Tech) • NPTEL Video • Class projects • Classroom discussion • Group discussion • Individual projects • Lecturing • Textbook assignments • Swayam videos

C. PLAN OF THE WORK:

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Programming In C Lab		Syllabus given Introduction given to the students, how programs run?, Where it will be used in real time with sample programs	11/08/2021	3	-	-

	Exercise : I	A)To Find Simple Interest B)Calculate Area Of Rectangle				
Programming In C Lab	Exercise : II	a)To Find The Roots Of Quadratic Equation (b)To Find The Biggest Of 3 Given Numbers	18/8/2021	3	-	-
Programming In C Lab	Exercise : III	a)To Find Sum Of Individual Digits Of A Given Number Using While Statement b) To Find The Sum Of Odd Numbers Between 1 And 100 Using Do … While Statement.	27/8/2021	3	-	-
Programming In C Lab	Exercise : III	To Find The Sum And Average Of The Given 'N' Numbers Using For Loop.	4/09/2021	3	-	-
Programming In C Lab	Exercise : IV	. a)To Find The Factorial Of The Given Number Using Recursive Function b) To Calculate The Binomial Coefficient	14/09/2021	3		-
Programming In C Lab	Exercise : V	a) To Sort The Given Set Of Numbers. b) Program To Perform The Addition Of Two Given Matrices.	21/09/2021	3		-
Programming In C Lab	Exercise : V	c) Program to perform the multiplication of two given matrices.	28/09/2021	3	-	-
Programming In C Lab	Exercise : VI	a) Program to check whether the given string is palindrome or not. b) Program to arrange the given set of names in alphabetical order.	6/10/2021	3	-	-
Programming In C Lab	Exercise : VII	Program to illustrate the use of pointers in arithmetic operations.	13/10/2021	3	-	-
Programming In C Lab	Exercise : VII	Program to compute the sum of all elements stored in an array using pointers.	16/10/2021	3	-	-
Programming In C Lab	Exercise : VII	Program to swap the two values using pointers. Program to prepare mark sheet using array.	18/11/2021	3	-	-

G.ACTIVITIES:

Activity Name	Details
Test	- Aug 4th Week - Sep 2nd Week - Mid- Oct 1st Week - Oct 2nd Week - Oct 3rd Week - Nov 1st Week - Mod-Nov 2nd Week

PRINCIPAL

TEACHING PLAN

A. GENERAL INFORMATION

Name of the Faculty : R.AGILA DEVI, Assistant Professor of Computer Science

Department   : Computer Science

Programme   **:** M.Sc.,

Programme Code **:** PGXB

Name of the Paper   : Design And Analysis Of Algorithms

Lecture Hours/ Practical Hours   **:** 5 hrs /week – Lecture Hours

B. ABOUT THE COURSE:

Name of the Course	Course Code	Course Objectives	Course Outcomes	Teaching Methodology
Design And Analysis Of Algorithms	PGXB	➢ Define the basic concepts of algorithms and analyze the performance of algorithms. ➢ Discuss various algorithm design techniques for developing algorithms. ➢ Discuss various searching, sorting and graph traversal algorithms. ➢ Understand NP completeness and identify different NP complete problems. ➢ Discuss various advanced topics on algorithms	On completion of the course learner will be able to ➢ Analyze different scenarios running time of algorithms using Asymptotic notations and Design using Recursion. ➢ Apply divide and conquer strategy for design of various algorithms ➢ Develop algorithms for well known problems using greedy methods. ➢ Understand the concept backtracking for traversal and search algorithms. ➢ Describe and apply dynamic programming approach designing graph and matrix based algorithms.	➢ Black Board ➢ PowerPoint Presentation ➢ E-Content ➢ OHP ➢ Flipped Classrooms (High Tech) ➢ NPTEL Video ➢ Class projects ➢ Classroom discussion ➢ Group discussion ➢ Individual projects ➢ Lecturing ➢ Textbook assignments ➢ Swayam

videos

C. PLAN OF THE WORK:

Name of the Course	Unit/Modules	Topic to be Covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
Design And Analysis Of Algorithms	I/Module - I	Algorithm Definition – Algorithm Specification – Performance Analysis.	09/08/2021 to 12/08/2021	4	-	-
Design And Analysis Of Algorithms	I/ Module - II	Elementary of Data Structures: Stacks and Queues with example	13/08/2021 to 16/08/2021	4	-	-
Design And Analysis Of Algorithms	I/ Module - III	Trees – Dictionaries – Priority Queues – Types	17/08/2021 to 23/08/2021	4	-	-
Design And Analysis Of Algorithms	I/ Module - IV	Sets and Disjoint Set Union – Graphs.	24/08/2021 to 27/08/2021	3	-	Unit I -15 hrs
Design And Analysis Of Algorithms	II/Module - I	The General Method – Defective Chessboard	28/08/2021 to 01/09/2021	4	-	-
Design And Analysis Of Algorithms	II/ Module - II	Binary Search-Types	02/09/2021 to 04/09/2021	3	-	-
Design And Analysis Of Algorithms	II/ Module - III	Finding The Maximum And Minimum	06/09/2021 to 08/09/2021	3	-	-
Design And Analysis Of Algorithms	II/ Module - IV	Merge Sort with Example	09/09/2021 to 13/09/2021	2	-	
Design And Analysis Of Algorithms	II/ Module - V	Quick Sort – Selection - Strassen's Matrix Multiplication.	14/09/2021 to 16/09/2021	3		Unit II -15 hrs
Design And Analysis Of Algorithms	III/Module - I	General Method - Container Loading	17/09/2021 to 20/09/2021	3	-	-
Design And Analysis Of Algorithms	III/ Module - II	Tree Vertex Splitting – Job Sequencing With Deadlines	21/09/2021 to 23/09/2021	3	-	-

Design And Analysis Of Algorithms	III/ Module - III	Minimum Cost Spanning Trees - Optimal Storage On Tapes	24/09/2021 to 27/09/2021	3	-	-
Design And Analysis Of Algorithms	III/ Module - IV	Optimal Merge Patterns - Single Source Shortest Paths.	28/09/2021 to 30/09/2021	3	-	-
Design And Analysis Of Algorithms	III/ Module - V	Knapsack Problem	01/10/2021 to 04/10/2021	3	-	Unit III -15 hrs
Design And Analysis Of Algorithms	IV/Module - I	The General Method – Multistage Graphs – All-Pairs Shortest Paths	05/10/2021 to 07/10/2021	2	-	-
Design And Analysis Of Algorithms	IV/ Module - II	Single-Source Shortest Paths - Optimal Binary Search Trees	08/10/2021 to 11/10/2021	2	-	-
Design And Analysis Of Algorithms	IV/ Module - III	String Editing - 0/1 Knapsack - Reliability Design - The Traveling Salesperson Problem	12/10/2021 to 14/10/2021	4	-	-
Design And Analysis Of Algorithms	IV/ Module - IV	Flow Shop Scheduling. Basic Traversal and Search Techniques: Techniques for Binary Trees	15/10/2021 to 18/10/2021	4	-	-
Design And Analysis Of Algorithms	IV/ Module - V	Techniques for Graphs – Connected Components and Spanning Trees – Biconnected Components and DFS.	19/10/2021 to 21/10/2021	3	-	Unit IV -15 hrs
Design And Analysis Of Algorithms	V/Module - I	The General Method – The 8-Queens Problem – Sum of Subsets	22/10/2021 to 26/10/2021	4	-	-
Design And Analysis Of Algorithms	V/ Module - II	Graph Coloring – Hamiltonian Cycles	27/10/2021 to 30/10/2021	3	-	-
Design And Analysis Of Algorithms	V/ Module - III	Branch and Bound: The Method - 0/1 Knapsack Problems.	01/11/2021 to 05/11/2021	4	-	-
Design And Analysis Of Algorithms	V/ Module - IV	Knapsack Problem	06/11/2021 to 10/11/2021	3	-	Unit V - 15 hrs Total-75 hrs

GG. **ACTIVITIES:**

Activity Name	Details
Test	• Unit I- Aug 4th Week • Unit II- Sep 2nd Week • Mid- Oct 1st Week

	• Unit III- Oct 2nd Week • Unit IV- Oct 3rd Week • Unit V- Nov 1st Week • Mod-Nov 2nd Week
Assignment	• Unit I- Aug 3rd Week • Unit II- Sep 4th Week • Unit III- Oct 3rd Week • Unit IV- Oct 4th Week • Unit V- Nov 1st Week
Quiz	Quiz during November 3rd week for Unit 1 to Unit 5
Seminar	During November 3rd Week (Titles given to students from Unit 1 to Unit 5)
Mentor / Mentee Meeting	Weekly once

PRINCIPAL