

E.M. GOPALAKRISHNA KONE YADAVA WOMEN'S COLLEGE

An Autonomous Institution -Affiliated to Madurai Kamaraj University

Re-accredited (3rd Cycle) with Grade A⁺ & CGPA 3.51 by NAAC



LESSON PLAN

2023-2024

DEPARTMENT OF COMPUTER SCIENCE

(UG – Even Semester)



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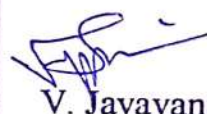
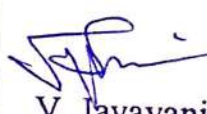
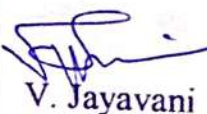
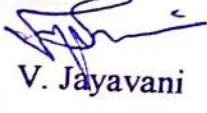
LESSON PLAN
2023-2024


Semester : II

Sub. Code : 23OUCS21

Title of the Paper: Data Structures and Algorithms

Total Hours : 75 Hours

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec'23	I	Abstract Data Types (ADTs) - List ADT - array-based implementation - linked list implementation singly linked lists - circular linked lists - doubly- linked lists - applications of lists - Polynomial Manipulation - All operations – Insertion – Deletion – Merge - Traversal.	I B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 V. Jayavani
Jan'24	II	Stack ADT – Operations – Applications – Evaluating arithmetic expressions - Conversion of infix to postfix expression - Queue ADT – Operations - Circular Queue – Priority Queue - dequeuer applications of queues.	I B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 V. Jayavani
Feb'24	III	Tree ADT - tree traversals - Binary Tree ADT - expression trees - applications of trees - binary search tree ADT - Threaded Binary Trees - AVL Trees - B-Tree - B+ Tree – Heap - Applications of heap.	I B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 V. Jayavani
Mar'24	IV	Definition - Representation of Graph - Types of graph - Breadth first traversal – Depth first traversal - Topological sort - Bi-connectivity – Cut vertex - Euler circuits - Applications of graphs.	I B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 V. Jayavani

Apr'24	V	Searching- Linear search - Binary search - Sorting - Bubble sort - Selection sort - Insertion sort - Shell sort - Radix sort - Hashing - Hash functions - Separate chaining - Open Addressing - Rehashing Extendible Hashing.	I B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	V. Jayavani 
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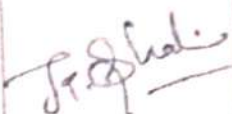
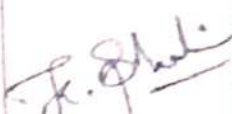
LESSON PLAN 2023-2024

Semester: II


Sub. Code : 23OUCS21

Title of the Paper : Data Structures and Algorithms

Total Hours : 75

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec 23	I	Abstract Data Types (ADTs) - List ADT - array-based implementation - linked list implementation singly linked lists - circular linked lists - doubly-linked lists - applications of lists - Polynomial Manipulation - All operations - Insertion - Deletion - Merge - Traversal.	I B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms. K. Shalini)
Jan 24	II	Stack ADT - Operations - Applications - Evaluating arithmetic expressions - Conversion of infix to postfix expression - Queue ADT - Operations - Circular Queue - Priority Queue - dequeuer applications of queues.	I B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms. K. Shalini)
Feb 24	III	Tree ADT - tree traversals - Binary Tree ADT - expression trees -applications of trees - binary search tree ADT - Threaded Binary Trees - AVL Trees - B-Tree - B+ Tree - Heap - Applications of heap.	I B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms. K. Shalini)
Mar 24	IV	Definition - Representation of Graph - Types of graph - Breadth first traversal - Depth first traversal - Topological sort - Bi-connectivity - Cut vertex - Euler circuits -Applications of graphs.	I B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms. K. Shalini)

Apr 24	V	Searching- Linear search - Binary search - Sorting - Bubble sort - Selection sort - Insertion sort - Shell sort - Radix sort - Hashing - Hash functions - Separate chaining - Open Addressing - Rehashing Extendible Hashing	I B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	(Ms.K.Shalini)
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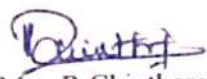
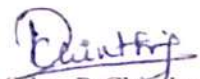
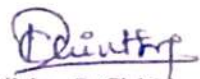
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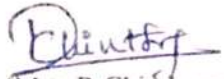
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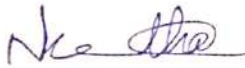
Semester : II

Title of the Paper : Fundamentals of Information Technology

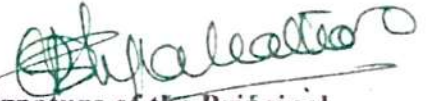
Total Hours : 30

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introductory concepts: Memory unit – CPU. Input Devices: Key board, Mouse and Scanner. Output devices: Monitor, Printer. Introduction to Operating systems & its features: DOS– UNIX–Windows. Introduction to Programming Languages.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
January 2024	II	Word Processing: Open, Save and close word document; Editing text – tools, formatting, bullets; Spell Checker - Document formatting – Paragraph alignment, indentation, headers and footers, numbering; printing– Preview, options, merge.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
February 2024	III	Spreadsheets: Excel – opening, entering text and data, formatting, navigating; Formulas–entering, handling and copying; Charts–creating, formatting and printing, analysis tables, preparation of financial statements, introduction to data analytics.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)

March 2024	IV,V	<p>Database Concepts: The concept of data base management system; Data field, records, and files, Sorting and indexing data; Searching records. Designing queries, and reports; Linking of data files; Understanding Programming environment in DBMS; Developing menu drive applications in query language(MS-Access).</p> <p>Power point: Introduction to Power point - Features - Understanding slide typecasting & viewing slides - creating slide shows. Applying special object - including objects & pictures - Slide transition-Animation effects, audio inclusion, timers.</p>	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
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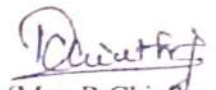
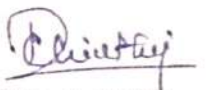
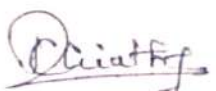
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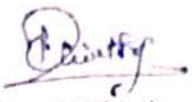
LESSON PLAN

2023-2024 -----

Sub. Code : 23OUCSSECN2
 Title of the Paper : OFFICE AUTOMATION
 Total Hours : 30

Semester : II

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introductory concepts: Memory unit- CPU-Input Devices: Key board, Mouse and Scanner. Output devices :Monitor ,Printer. Introduction to Operating systems...&its...features:DOS--UNIX--Windows. Introduction to Programming Languages.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
January 2024	II	Word Processing: Open, Save and close word document; Editing text - tools, formatting, bullets;SpellChecker - Document....formatting....- Paragraph alignment, indentation, headers and footers,numbering;printing- Preview,options,merge.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
February 2024	III	Spreadsheets:Excel opening,entering text and data,formatting,navigating;Formulas entering,handling and copying;Charts..... creating, formatting and printing,analysis tables,preparationoffinancialstatements,introducti ontodataanalytics.	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)

March 2024	IV,V	Database Concepts: The concept of data base management system; Data field, records, and files, Sorting and indexing data, Searching records, Designing queries, and reports; Linking of datafiles; Understanding Programming environment in DBMS; Developing menu drive applications inquiry language(MS Access). Power point: Introduction to Power point - Features - Understanding slide typecasting &viewingslides - creating slide shows. Applying special object - including objects & picture	I Year	5Hrs	Chalk & Talk	 (Mrs. R.Chinthamani)
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LESSON PLAN
2023-2024



Class : II B.Sc., Computer Science



Semester : IV


Sub. Code : 22OUCS41


Title of the Paper: Data Structures

Total Hours : 60 Hours

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec' 23	I	Introduction and Overview: Introduction – Basic Terminology; Elementary Data Organization – Data Structures – Data Structure Operations – Algorithms: Complexity, Time – Space Tradeoff. Preliminaries: Algorithmic Notation– Complexity of Algorithms. Arrays, Records and Pointers: Linear Arrays – Traversing Linear Arrays – Inserting and Deleting - Sorting: Bubble Sort – Searching: Linear Search – Binary Search.	II B.Sc(CS) 'A'	12 Hrs	Chalk & Talk	V. Jayavani 
Jan' 24	II	Linked Lists: Introduction – Linked Lists– Representation of Linked Lists in Memory– Traversing a Linked List–Searching a Linked List–Memory Allocation; Garbage Collection–Insertion into a Linked List–Deletion from a Linked List–	II B.Sc(CS) 'A'	12 Hrs	Chalk & Talk	V. Jayavani 

		Header Linked Lists- Stacks, Queues, Recursion: Introduction - Stacks -Array Representations of Stacks-Linked Representations of Stacks-Arithmetic Expressions; Polish Notation-Quick sort, an Applications of Stacks- Recursion- Queues - Linked representation of Queues- Deques.				
Feb' 24	III	Trees: Introduction- Binary Trees- Representing Binary Trees in Memory- Traversing Binary Trees - Binary Search Trees- Searching and Inserting in Binary Search Trees - Deleting in Binary Search Tree - AVL Search Trees- Insertion in an AVL Search Tree- Deletion in an AVL Search Tree- B Trees - Searching, Insertion and Deletion in a B-tree - Heap; Heapsort.	II B.Sc(CS) 'A'	12 Hrs	Chalk & Talk	V. Jayavani 
Mar' 24	IV	Graphs and Their Applications: Introduction - Graph Theory Terminology- Sequential Representation of Graphs: Adjacency Matrix; Path Matrix - Warshall's Algorithm; Shortest Paths - Linked Representation of a Graph- Operations on Graphs- Traversing a Graph-Spanning Tree.	II B.Sc(CS) 'A'	12 Hrs	Chalk & Talk	V. Jayavani 

Apr' 24	V	Sorting and Searching: Introduction-Sorting- Insertion Sort-Selection Sort-Merging - Merge- Sort -Radix Sort- Searching and Data Modification-Hashing.- line Arguments.	II B.Sc(CS) 'A'	12 Hrs	Chalk & Talk	V. Jayavani 
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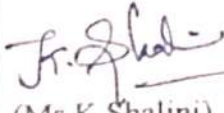
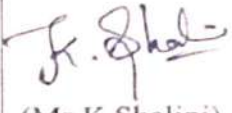
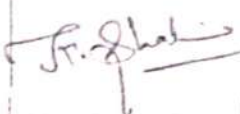
LESSON PLAN
2023-2024

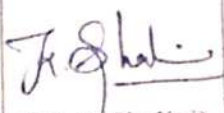
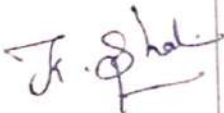
Semester: IV

Sub. Code : 22OUCS41

Title of the Paper : Data Structures

Total Hours : 60

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec 23	I	Introduction and Overview: Introduction – Basic Terminology; Elementary Data Organization – Data Structures – Data Structure Operations – Algorithms: Complexity, Time – Space Tradeoff. Preliminaries: Algorithmic Notation– Complexity of Algorithms. Arrays, Records and Pointers: Linear Arrays – Traversing Linear Arrays – Inserting and Deleting – Sorting: Bubble Sort – Searching: Linear Search – Binary Search.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms.K.Shalini)
Jan 24	II	Linked Lists: Introduction – Linked Lists – Representation of Linked Lists in Memory– Traversing a Linked List – Searching a Linked List – Memory Allocation; Garbage Collection– Insertion into a Linked List – Deletion from a Linked List – Header Linked Lists – Stacks, Queues, Recursion: Introduction – Stacks – Array Representations of Stacks – Linked Representations of Stacks – Arithmetic Expressions; Polish Notation – Quick sort, an Applications of Stacks – Recursion – Queues – Linked representation of Queues – Deques.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms.K.Shalini)
Feb 24	III	Trees: Introduction – Binary Trees – Representing Binary Trees in Memory – Traversing Binary Trees – Binary Search Trees – Searching and Inserting in Binary Search Trees – Deleting in Binary Search Tree – AVL Search Trees- Insertion in an AVL	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms.K.Shalini)

		Search Tree- Deletion in an AVL Search Tree - B Trees - Searching, Insertion and Deletion in a B-tree - Heap; Heap sort.				
Mar 24	IV	Graphs and Their Applications: Introduction - Graph Theory Terminology - Sequential Representation of Graphs: Adjacency Matrix; Path Matrix - Warshall's Algorithm; Shortest Paths - Linked Representation of a Graph - Operations on Graphs- Traversing a Graph - Spanning Tree.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms.K.Shalini)
Apr 24	V	Sorting and Searching: Introduction - Sorting - Insertion Sort - Selection Sort - Merging - Merge Sort - Radix Sort - Searching and Data Modification - Hashing.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Ms.K.Shalini)


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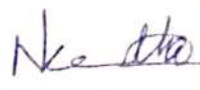
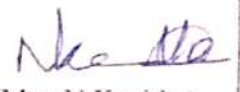
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LESSON PLAN
2023-2024

Sub. Code : 22OUCS42
Title of the Paper : Programming in JAVA
Total Hours : 60

Class: II B.Sc(CS) 'A'

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Java Evolution: Java history - Java Features - Java Environment. Over view of Java Language: Simple Java Program - Java program Structure - Java Tokens - Installing and Configuring Java - Implementing a Java program - Java Virtual Machine. Constants, Variables and Data Types: Introduction - Constants - Variables - Data types - Declaration of variables- Giving Values to Variables- Scope of Variables- Symbolic Constants- Type Casting.	12Hrs	Chalk & Talk	 (Mrs.N.Kavitha)
January 2024	II	Operators and Expressions: Introduction - Arithmetic Operators - Relational Operators - Logical Operators - Assignment Operators - Increment and Decrement Operators - Conditional Operators - Bitwise Operators - Special operators - Arithmetic Expressions - Evaluation of Expression - Operator precedence and Associativity. Decision Making and Branching: Introduction - Decision Making with If Statement - Simple If Statement - The If... Else Statement - Nesting of If... Else Statements -	12Hrs	Chalk & Talk	 (Mrs. N.Kavitha)

		Switch Statement – The ? Operator. Decision Making and Looping: Introduction - While Statement - do Statement - for Statement - Jumps in Loops – return Statement.			
February 2024	III,IV	Classes, Objects and Methods: Introduction - Defining a Class - Methods Declaration - Creating Objects - Accessing Class Members – Constructors - Method Overloading- Static Members- Nesting of Methods- Inheritance: Extending a Class- Overriding Methods- Final Variables and Methods- Final Classes- Finalizer Methods- Abstract Methods and Classes- Visibility Control. Arrays, Strings and Vectors: Introduction-One-dimensional Arrays Creating an Array-Two-dimensional Arrays- Strings- Vectors- Wrapper Classes. Interfaces: Multiple Inheritances: Introduction-Defining Interfaces-Extending Interfaces-Implementing Interfaces-Accessing Interface Variables. Packages: Putting Classes Together: Introduction-Java API Packages-Using System packages-Naming conventions-Creating Packages-Accessing a package-Using a Package Adding a Class to a Package-Hiding Classes-Static Import.	12Hrs	Chalk & Talk	 (Mrs. N.Kavitha)
March 2024	IV,V	Multithreaded Programming: Introduction-Creating Threads-Extending the thread Class-Stopping and Blocking a Thread Life Cycle of a Thread-Using Thread Methods-Thread Exceptions-Thread Priority	12Hrs	Chalk & Talk	 (Mrs. N.Kavitha)

	<p>Synchronization- Implementing the 'Runnable' Interface-Inter- Thread Communication. Applet Programming: Introduction-How Applets Differ from Applications Preparing to Write Applets- Building Applet Code- Applet Life Cycle-Creating an Executable Applet- Designing a Web Page- Applet Tag-Adding Applet to HTML File-Running the Applet More about Applet tag-Passing parameters to Applets-Aligning the Display-More about HTML tag-Displaying Numerical values-Getting Input from the user-Event Handling. Managing Input/Output Files in Java: Byte Stream Classes-Character Stream Classes- Other Stream Classes.</p>			
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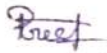
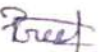
LESSON PLAN
2023-2024

Sub. Code : 22OUCS42

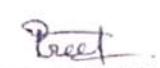
Semester: IV

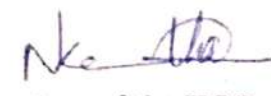
Title of the Paper : Programming in JAVA

Total Hours : 60

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec'23	I	Unit – I: Java Evolution: Java history - Java Features - Java Environment. Over view of Java Language: Simple Java Program - Java program Structure - Java Tokens - Installing and Configuring Java - Implementing a Java program - Java Virtual Machine. Constants, Variables and Data Types: Introduction – Constants – Variables - Data types - Declaration of variables- Giving Values to Variables- Scope of Variables- Symbolic Constants- Type Casting.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Mrs.P.Krishna Geetha)
Jan'24	II	Unit-II: Operators and Expressions: Introduction - Arithmetic Operators - Relational Operators - Logical Operators - Assignment Operators - Increment and Decrement Operators - Conditional Operators - Bitwise Operators - Special operators - Arithmetic Expressions - Evaluation of Expression - Operator precedence and Associativity. Decision Making and Branching: Introduction - Decision Making with If Statement -	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Mrs.P.Krishna Geetha)

		Simple If Statement - The If...Else Statement - Nesting of If...Else Statements - Switch Statement - The ?: Operator. Decision Making and Looping: Introduction - While Statement - do Statement - for Statement - Jumps in Loops - return Statement.				
Feb'24	III	Unit-III: Classes, Objects and Methods: Introduction - Defining a Class - Methods Declaration - Creating Objects - Accessing Class Members - Constructors - Method Overloading- Static Members- Nesting of Methods- Inheritance: Extending a Class- Overriding Methods- Final Variables and Methods- Final Classes- Finalizer Methods- Abstract Methods and Classes- Visibility Control. Arrays, Strings and Vectors: Introduction-One-dimensional Arrays Creating an Array-Two-dimensional Arrays- Strings- Vectors- Wrapper Classes. Interfaces: Multiple Inheritances: Introduction-Defining Interfaces-Extending Interfaces-Implementing Interfaces-Accessing Interface Variables.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	<i>Pracet</i> (Mrs.P.Krishna Geetha)
Mar'24	IV	Unit-IV: Packages: Putting Classes Together: Introduction-Java API Packages-Using System packages-Naming conventions-Creating Packages-Accessing a package-Using a Package Adding a Class to a Package- Hiding Classes-Static Import. Multithreaded	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	<i>Pracet</i> (Mrs.P.Krishna Geetha)

		Programming: Introduction- Creating Threads-Extending the thread Class-Stopping and Blocking a Thread Life Cycle of a Thread-Using Thread Methods-Thread Exceptions-Thread Priority Synchronization- Implementing the 'Runnable' Interface-Inter- Thread Communication.				
Mar'24	V	Unit-V: Managing Errors and Exceptions: Introduction- Types of Errors-Exceptions- Syntax of Exception Handling Code-Multiple Catch Statements-Using Finally Statement-Throwing our own Exceptions- Improved Exception Handling in Java SE 7-Using Exceptions for Debugging. Applet Programming: Introduction-How Applets Differ from Applications Preparing to Write Applets- Building Applet Code- Applet Life Cycle-Creating an Executable Applet- Designing a Web Page- Applet Tag-Adding Applet to HTML File-Running the Applet More about Applet tag-Passing parameters to Applets-Aligning the Display-More about HTML tag-Displaying Numerical values-Getting Input from the user-Event Handling. Managing Input/Output Files in Java: Byte Stream Classes-Character Stream Classes- Other Stream Classes.	II B.Sc(CS) 'B'	12 Hrs	Chalk and Talk	 (Mrs.P.Krishna Geetha)


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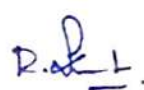



LESSON PLAN
2023-2024


Sub. Code : 21S61

Class: III B.Sc.,CS 'A' Sec

Title of the Paper : Data Communication and Networking

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introduction - Data Communications - Networks - The Internet - Protocols and Standards. Network Models: The OSI Model -Layers in the OSI Model- TCP/IP Protocol Suite -Addressing.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)
January 2024	II	Transmission media - Guided Media - Unguided Media: Wireless .Switching: Circuit -Switched Network - Datagram Networks - Virtual Circuit Networks - Structure of a Switch.	12Hrs	Chalk & Talk	 (Mrs. R.Keerthana)
February 2024	III	Error Detection and Correction: Introduction - Block Coding - Linear Block Codes - Cyclic Codes. Data Link Control: Framing - Flow and Error Control. Network Layer: Logical Addressing: IPv4 Addresses - IPv6 Addresses.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)
February 2024	IV	Network Layer: Delivery, Forwarding and Routing: Delivery - Forwarding Unicast Routing Protocols- Multicast Routing Protocols. Process-to-Process Delivery: UDP, TCP and SCTP: Process-to-Process	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)

		Delivery - User Datagram Protocol (UDP) TCP - SCTP. Domain Name System: DNS in the Internet.			
March 2024	V	Network Security: Security Services - Message Confidentiality - Message Integrity - Message Authentication - Digital Signature - Entity Authentication - Security in the Internet : IPSec, SSL/TGS, PGP, VPN and Firewalls. IP Security (IPSec) - Firewalls.	12Hrs	Chalk & Talk	 (Mrs. R. Keerthana)



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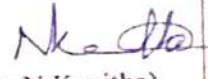
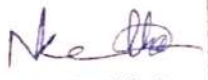
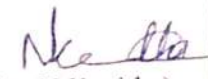
2023-2024


Class: III B.Sc(CS) 'B'

Sub. Code : 21S61

Title of the Paper : Data Communication and Networking

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introduction - Data Communications - Networks - The Internet - Protocols and Standards. Network Models: The OSI Model -Layers in the OSI Model- TCP/IP Protocol Suite -Addressing.	12Hrs	Chalk & Talk	 (Mrs. N. Kavitha)
January 2024	II	Transmission media - Guided Media - Unguided Media: Wireless .Switching: Circuit -Switched Network - Datagram Networks - Virtual Circuit Networks - Structure of a Switch.	12Hrs	Chalk & Talk	 (Mrs. N. Kavitha)
February 2024	V	Network Security: Security Services - Message Confidentiality - Message Integrity - Message Authentication - Digital Signature - Entity Authentication -Security in the Internet : IPSec, SSL/TGS,PGP,VPN and Firewalls. IPSecurity(IPSec) - Firewalls.	12Hrs	Chalk & Talk	 (Mrs. N. Kavitha)


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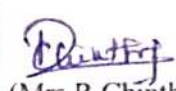
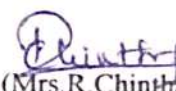
2023-2024

Sub. Code : 21S61

Class: III B.Sc(CS) 'B'

Title of the Paper : Data Communication and Networking

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
February 2024	III	Error Detection and Correction: Introduction – Block Coding – Linear Block Codes – Cyclic Codes. Data Link Control: Framing – Flow and Error Control. Network Layer: Logical Addressing: IPv4 Addresses – IPv6 Addresses.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
March 2024	IV	Network Layer: Delivery, Forwarding and Routing: Delivery – Forwarding – Unicast Routing Protocols- Multicast Routing Protocols. Process-to-Process Delivery: UDP, TCP and SCTP: Process-to-Process Delivery - User Datagram Protocol (UDP) –TCP – SCTP. Domain Name System: DNS in the Internet.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)

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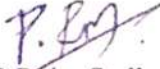

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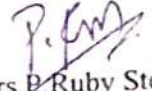
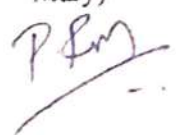
Sub. Code : 21S62

Class: III B.Sc(CS) 'A'

Title of the Paper : Web Programming

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introduction to HTML5: Part1: Introduction-Editing HTML5-First HTML5 Example-Headings-Linking-Images-Special Characters and Horizontal Rules-Lists-Tables-Forms-Internal Linking-Meta Element-Introduction to HTML5:Part2: New HTML5 Form Input Types. Introduction to Cascading Style SheetsTM(CSS): Part1: Introduction -Inline Styles-Embedded Style Sheets- Linking External Style Sheets-Backgrounds - Introduction to Cascading Style SheetsTM(CSS):Part 2: Text Shadows- Rounded Corners - Color - Box Shadows - Linear Gradients -Radial Gradients - Multiple Background Images.	12Hrs	Chalk & Talk	 (Mrs.P.Ruby Stella Mary)
January 2024	II	JavaScript: Introduction to Scripting: Introduction-Your First Script: Displaying a Line of Text with JavaScript in a Web Page. JavaScript: Function: - Function Definitions-JavaScript	12Hrs	Chalk & Talk	 (Mrs.P.Ruby Stella Mary)

		Global Functions. JavaScript: Arrays: Arrays-Declaring and Allocating Arrays-Passing Arrays to Functions- Multidimensional Arrays. JavaScript: Objects: Math Object- String Objects- Date Object-Boolean and Number Objects- Document Object.			
February 2024	III,IV	HTML5: Introduction to Canvas: Introduction- canvas Coordinate System- Rectangles-using paths to Draw Line- Drawing Arcs and Circles- Shadows-Quadratics Curves-Bezier Curves. XML -Introduction - XMLBasics-Structuring Data-XML Namespaces- Document Type Definition (DTD)-W3C XML Vocabularies- Extensible Stylesheet Language and XSL Transformations- Document Object Model (DOM). Introducing PHP: What is PHP -Server-Side Scripting Overview: Static HTML - Client-Side Technologies - Server- Side Scripting - Getting Started with PHP.	12Hrs	Chalk & Talk	 (Mrs. P. Ruby Stella Mary)
March 2024	IV,V	Installing PHP - Learning PHP Syntax and Variables: PHP Syntax's Syntax Is C-Like - Comments - Variables - Types in PHP - The Simple Types - Doubles - Booleans - NULL - Strings - Output. Learning PHP Control Structures and Functions: Boolean Expressions - Branching - Looping - Using	12Hrs	Chalk & Talk	(Mrs. P. Ruby Stella Mary) 

		Functions -- Function Documentation -- Defining Your Own Functions -- Functions and Variable Scope -- Function Scope -- Learning PHP String Handling: Strings in PHP, String Functions.			
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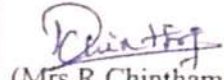
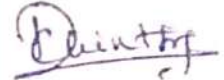
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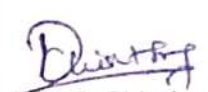
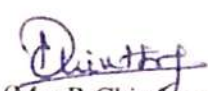
Sub. Code : 21S62

Class: III B.Sc(CS) 'B'

Title of the Paper : Web Programming

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
December 2023	I	Introduction to HTML5: Part1: Introduction- Editing HTML5-First HTML5 Example- Headings-Linking- Images-Special Characters and Horizontal Rules-Lists-Tables- Forms-Internal Linking- Meta Element- Introduction to HTML5:Part2: New HTML5 Form Input Types. Introduction to Cascading Style SheetsTM(CSS): Part1: Introduction -Inline Styles-Embedded Style Sheets- Linking External Style Sheets-Backgrounds - Introduction to Cascading Style SheetsTM(CSS):Part 2: Text Shadows- Rounded Corners - Color - Box Shadows - Linear Gradients -Radial Gradients - Multiple Background Images.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
January 2024	II	JavaScript: Introduction to Scripting: Introduction- Your First Script: Displaying a Line of Text with JavaScript in a Web Page. JavaScript: Function: Function Definitions-JavaScript	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)

		Global Functions. JavaScript: Arrays: Arrays-Declaring and Allocating Arrays-Passing Arrays to Functions- Multidimensional Arrays. JavaScript: Objects: Math Object- String Objects- Date Object-Boolean and Number Objects- Document Object.			
February 2024	III,IV	HTML5: Introduction to Canvas: Introduction- canvas Coordinate System- Rectangles-using paths to Draw Line- Drawing Arcs and Circles- Shadows-Quadratics Curves-Bezier Curves. XML -Introduction - XMLBasics-Structuring Data-XML Namespaces- Document Type Definition (DTD)-W3C XML Vocabularies- Extensible Stylesheet Language and XSL Transformations- Document Object Model (DOM). Introducing PHP: What is PHP -Server-Side Scripting Overview: Static HTML - Client-Side Technologies - Server- Side Scripting - Getting Started with PHP.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
March 2024	IV,V	Installing PHP - Learning PHP Syntax and Variables: PHP Syntax's Syntax Is C-Like - Comments - Variables - Types in PHP - The Simple Types - Doubles - Booleans - NULL - Strings - Output. Learning PHP Control Structures and Functions: Boolean Expressions - Branching - Looping - Using	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)

		Functions - Function Documentation - Defining Your Own Functions - Functions and Variable Scope - Function Scope - Learning PHP String Handling: Strings in PHP, String Functions.			
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

LESSON PLAN 2023-2024

Sub. Code : 21SE6A

Semester: VI

Title of the Paper : Data Mining and Big Data Analysis

Total Hours : 60

Month	Unit	Description of the Syllabus	Class	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
Dec'23	I	Unit – I: Data warehousing: introduction- data warehouse architecture- dimensional modeling - OLAP operations-ROLAP- data marting - ETL- data cleaning ETL vs. ELT. Data mining: Introduction -- KDD vs. Data mining – DBMS vs. DM- DM techniques Issues and Challenges in Data Mining – Data mining application areas-other related areas.	III B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 (Mrs.P.Krishna Geetha)
Jan'24	II	Unit-II: Classification Technique: Introduction – what is Decision Trees? - Tree Construction Principle - Decision Tree construction with presorting- CLOUDS- pruning technique. Clustering techniques: Clustering paradigms – K Medeoid algorithms – CLARA – Hierarchical Clustering - DBSCAN – BIRCH – CURE. Decision Trees: Decision Tree Construction Algorithms – CART – ID3.	III B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	 (Mrs.P.Krishna Geetha)
Feb'24	III	Unit-III: Association Rules: what is an association rule?- methods to discover association rules - A priori	III B.Sc(CS) 'A'	12 Hrs	Chalk and Talk	

		<p>algorithm - Partition algorithm - Dynamic Item set Counting algorithm - FP-tree growth algorithm-Eclat and dEclat - border algorithm - generalized association rule - Association Rules with Item Constraints. Other techniques: Introduction-what is neural network? - Learning in NN - Unsupervised Learning - support vector machine.</p>				<p><i>Pooja</i> (Mrs.P.Krishna Geetha)</p>
Mar'24	IV	<p>Unit-IV: Genetic algorithm: Introduction-Basic steps of GA-selection-crossover-mutation data mining using GA. Web mining: Introduction - Web content mining - Web structure mining - Web usage mining. Temporal and Spatial mining: Introduction-what is temporal data mining? - temporal association rule - The GSP algorithm - SPADE SPIRIT-event prediction problem-time series analysis-spatial mining- Spatial mining tasks.</p>	<p>III B.Sc(CS) 'A'</p>	12 Hrs	Chalk and Talk	<p><i>Pooja</i> (Mrs.P.Krishna Geetha)</p>
Mar'24	V	<p>Unit-V: Introduction to big data: characteristics of data-evolution of big data-definition of big data-challenge with big data-what is big data? - What is changing in the realms of big data? Introduction to hadoop: hadoop overview-hadoop distributed file system-processing data with hadoop-interacting with hadoop ecosystem. Introduction to MAPREDUCE programming: Introduction</p>	<p>III B.Sc(CS) 'A'</p>	12 Hrs	Chalk and Talk	<p><i>Pooja</i> (Mrs.P.Krishna Geetha)</p>

		-mapper-reducer-combiner- partitioner searching- sorting-compression.				
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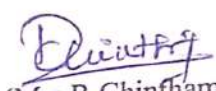
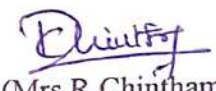
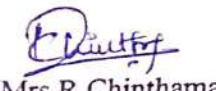
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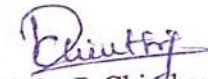
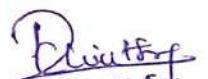
Class: III B.Sc(CS) 'A'

Sub. Code : 21SE5A

Title of the Paper : Computer Graphics

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
June 2023	I	A Survey of Computer Graphics: Computer-Aided Design – Presentation Graphics – Computer Art-Entertainment- Education and Training – Visualization – Image Processing – Graphical User Interface. Overview of Graphics Systems: Video Display Devices- Raster-Scan Systems- Random-Scan Systems- Input Devices- Graphics software.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
July 2023	II	Output Primitives: Point and Lines. Line-Drawing Algorithms:-DDA Algorithm- Bresenham's Line algorithm – Circle-Generating Algorithm – Character Generation. Attributes of Output Primitives: Line Attributes – Curve Attributes – Area-Fill Attributes – Character Attributes – Bundled Attributes.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
August 2023	III	Two-Dimensional Geometric transformations: Basic Transformations - Matrix Representations – Composite Transformations. Two-Dimensional Viewing:	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)

		Two Dimensional Viewing Functions – Clipping Operations – Point Clipping - Line Clipping- Polygon Clipping – Curve Clipping – Text Clipping – Exterior Clipping.			
September 2023	IV	Graphical User Interfaces and Interactive Input Methods: Input of Graphical Data– Three-Dimensional Concepts: Three- Dimensional Display Methods – Three- Dimensional Graphics Packages. Three-Dimensional Object Representations: Polygon Surfaces – Curved Lines and Surfaces – Quadric Surfaces – Super quadrics.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)
October 2023	V	Color Models: Properties of Light – RGB Color Model – YIQ Color Models – CMY Color Model – HSB Color Model – Color Selection and Applications. Computer Animation: Design of Animation Sequences – General Computer Animation – Raster animations – Computer Animation languages – Key-Frame System.	12Hrs	Chalk & Talk	 (Mrs.R.Chinthamani)



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LESSON PLAN



2023-2024

Class: III B.Sc(CS) 'B'

Sub. Code : 21SE5A

Title of the Paper : Computer Graphics

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
June 2023	I	A Survey of Computer Graphics: Computer-Aided Design – Presentation Graphics – Computer Art-Entertainment- Education and Training – Visualization – Image Processing – Graphical User Interface. Overview of Graphics Systems: Video Display Devices-Raster-Scan Systems-Random-Scan Systems-Input Devices-Graphics software.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)
July 2023	II	Output Primitives: Point and Lines. Line-Drawing Algorithms:-DDA Algorithm- Bresenham's Line algorithm – Circle-Generating Algorithm – Character Generation. Attributes of Output Primitives: Line Attributes – Curve Attributes – Area-Fill Attributes – Character Attributes – Bundled Attributes.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)



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LESSON PLAN 2023-2024

Class: III B.Sc.,CS 'B' Sec

Sub. Code : 21SE5A

Title of the Paper : Computer Graphics

Total Hours : 60

Month	Unit	Description of the Syllabus	Hours Allocated	Teaching Mode & Methods	Course Teacher Signature
August 2023	III	Two-Dimensional Geometric transformations: Basic Transformations - Matrix Representations - Composite Transformations. Two-Dimensional Viewing: Two Dimensional Viewing Functions - Clipping Operations - Point Clipping - Line Clipping- Polygon Clipping - Curve Clipping - Text Clipping - Exterior Clipping.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)
September 2023	IV	Graphical User Interfaces and Interactive Input Methods: Input of Graphical Data-Three-Dimensional Concepts: Three-Dimensional Display Methods - Three-Dimensional Graphics Packages. Three-Dimensional Object Representations: Polygon Surfaces - Curved Lines and Surfaces - Quadric Surfaces - Super quadrics.	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)
October 2023	V	Color Models: Properties of Light - RGB Color Model - YIQ Color Models - CMY Color Model - HSB Color Model - Color Selection and Applications. Computer Animation: Design of Animation Sequences -	12Hrs	Chalk & Talk	 (Mrs.R.Keerthana)

		General Computer Animation – Raster animations – Computer Animation languages – Key- Frame System.			
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