



Name of the Course	B.Sc (DS - I) [2023-2024]
Subject	Computer Science
Paper Name	Programming With 'C'
Paper Code	-
Learning Outcomes	<p>student will be able to learn</p> <ul style="list-style-type: none"> <li>→ It provides exposure to problem-solving through programming.</li> <li>→ Basic concepts of 'C' programming</li> <li>→ provide complete knowledge of 'C'.</li> <li>→ Also by learning the basic programming constructs they can easily switch over to any other language in future.</li> </ul>
Faculty Name	Zikra Syed & Md. Reshma

Unit I	Topics	Teaching Pedagogy, Teaching Aids, Curricular Extra-curricular Activities etc.	No. of Hours
I	<p>* Computing Concepts:-</p> <ul style="list-style-type: none"> <li>→ Programming Languages</li> <li>→ Translator, slw's</li> <li>→ Problem solving Techniques</li> </ul>	<ul style="list-style-type: none"> <li>→ Lecture</li> <li>→ Audio/Video visual's</li> <li>→ Blackboard</li> <li>→ Assignment on Algorithm, flowchart</li> </ul>	06
	<p>* Overview of 'C'</p> <ul style="list-style-type: none"> <li>└ History</li> <li>└ structure of 'C'</li> <li>└ Executing 'C' program</li> </ul>	<ul style="list-style-type: none"> <li>→ collaboration</li> <li>→ Blackboard &amp; chalk</li> <li>→ creation &amp; execution of 'C' program</li> </ul>	06

	Constants Variables + Data Types	Lecture, Discussion, Blackboard, short seminar	08
	Operators + Expressions	- Flipped class, - PPT / Blackboard - creation & execution of programs	04
	Input & output operations	- student voice - Blackboard - Identifying I/O devices - slip test	04
Unit - II Title	Branching statements	- Discussion - Audio / video visual's - Lecturer - short questions - Assignment	08
	Looping statements	- collaboration - Blackboard & chalk - Conduction of quiz	06
	Arrays	- student voice - Blackboard / PPT's - slip test	04
Unit - IV Title	Character Arrays + strings	Group discussion, Lecture, quiz	08
	Functions	Peer-Review, Projector / TV (PPT), short questions	12

Unit-IV Title	Pointers	Student voice, PPT, Conduction of quiz	04
	Structures + Unions	collaboration, Lecture, execution of programs	08
	File management in 'C'	Just in time, blackboard, slip Test	06
			Total Hours: 82

Faculty

Name: Zikran Syed - Zikran

Mr. Reshma - Reshma

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# TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College T.S.W.R.D.C.(W), Mancherial

## SEMESTER PLAN

Names of the Course	Data Science II, Sem III
Subject Paper Name	Data Engineering with Python
Paper Name Subject	Computer Science
Paper Code	
Learning Outcomes	<p>At the end of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>→ Handle different types of files and work with text data</li> <li>→ Use regular expression equations</li> <li>→ Use Relational database via SQL</li> <li>→ Use tabular numeric data</li> <li>→ Use the data structures: data series &amp; frame</li> <li>→ Use pyplot for visualization</li> </ul>
Faculty Name	B. Tyothi

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc..	No. of Hours
Unit -1 Title	Introduction to Data science	Blackboard & chalk	02
Data Science Working with Files & Text data	File & Working with Text Data.	Computer (Searching @ following slideshare)	06
	Working with Text - Data	Oral test, Questionnaire Python IDLE 3.10.6 platform	02

Unit-2 Title				
Working with Text data & Regular Expression Operations.	(i) Working with Text data	Blackboard & chalk	} 04	
		Flipped session,		
		Computers (Python IDLE 3.10.6 version)		
		Slip test		
	(ii) Regular Expression operations	Blackboard & chalk	} 06	
		Discussion, Questionnaire		
	Program execution in Python IDLE 3.10.6.			
	Slip test.			
Unit-3 Title Working with Database & Working with Tabular Numeric Data	(i) Working with Database	Blackboard & chalk	} 06	
	Quiz session			
	Questionnaire (MCQ's)			
(ii) Working with Tabular Numeric Data	Python IDLE & Database connectivity	} 07		
	Discussion.			
	Oral test.			

Unit-4 Title	(i) Working with Data Series and frames	Blackboard & chalk	} 06
		Computer (Python Environment)	
		Practical (Python IDE 3.0.4)	
		Slip test	
	(ii) Plotting	Blackboard & chalk	} 06
		Slideshow (Computer)	
		PPT's (online through computer)	
Unit-5 Title	Data Engineering with Python practical		} 20
	① Miniproject		
	Practical		15
Total Hours			80

  
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Name of the College TSWRDCWD, Mancherial

## SEMESTER PLAN

Names of the Course	Data Science Sem IV
Subject	Computer Science
Paper Name	Machine Learning
Paper Code	IV
Learning Outcomes	<p>At the end of the course the students will be able to understand:</p> <ul style="list-style-type: none"> <li>(i) Basic of Machine Learning and its limitations</li> <li>(ii) Machine Learning algorithms: Supervised, unsupervised, bio-inspired.</li> <li>(iii) Probabilistic modeling and Associations - Rule mining.</li> </ul>
Faculty Name	B. Tyothi

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit -1 Title Introduction to Machine Learning, Nearest Neighbours	Introduction to Machine Learning	Blackboard & chalk	02
	Limits of Learning	Projector	02
	Geometry of Nearest Neighbours	Discussion	03
		Sliptest	

Unit-2 Title			T & D
The Perceptron, Practical issues and Linear models.	The Perceptron : Bio-inspired learning	Blackboard & chalk.	03
	Geometric interpretation	Seminar	02
	Improved generalization	Projector .	02
	(ii) Practical issues : Importance of good features	flipped class .	02
	Hypothesis testing and statistical significance.	T.V .	02
	Debugging Learning algorithms.	Quiz .	02
	(iii) Linear models : → Optimization framework for linear models.	Slip test	02
	Weight regularization, Support vector machines.	Discussion .	02
Unit-3 Title	Probabilistic modelling		02
Probabilistic modelling & Neural Networks.	Classification by Density estimation	Blackboard & chalk.	02
	Statistical estimation. Naive Bayes model .		03
	Prediction .	Questionnaire .	02
	Neural networks : Bio-inspired multilayer networks, the Backpropagation		02
	algorithm, Breadth/Depth Basis functions.	Slip test	02
			02





2022-2023



TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College : TSWRDCW, Mancherial

SEMESTER V - PLAN

Name of the Course	Bac (MSCS-III), Sem - V
Subject	Computer Science
Paper Name	Programming in Java
Paper Code	BC507
Learning Outcomes	<p>Knowledge of the structure and model of the java programming language</p> <p>➤ Students should be able to</p> <p>1) Use an integrated development environment to write, compile, run and test simple object oriented java programs</p> <p>2) Read and make elementary modifications to java programs that solve real - world problems</p>
Faculty Name	Zikran Syed

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	Nos. of Hours
Unit-1	Introduction - JVM, Java features	Lecture, Discussion, Given Assignment	02
Title	Creation and execution of programs, data types	Lecture, projector, quiz	02
	Type conversion, type casting	Discussion, Blackboard, Given assignment	02
	Conditional statements, Branching mechanism	Lecturer, projector, slip test	02
	Looping statements	Group discussion, blackboard	01
	Classes, objects, methods declaration	PPT, discussion, short seminar	02
	Methods overloading - lab practical	Flipped class, projector for execution of programs	

Unit-4 Title	Applets	Discussion , projector, given assignment on programs(lab)	05
	Events & its types	Questionnaire , blackboard, assignment on programs(lab)	02+02(p)
	Event handling	Flipped/seminar, projector, sample programs on events	02+02(p)
	AWT components	Group discussion , blackboard, assignment on AWT	05
	Swings	Peer review, projector, assignment on difference b/w AWT & swing	05

Total hours = 83

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# TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College Mancherial

## SEMESTER PLAN

Names of the Course	B.Sc(MPCS)-2 <sup>nd</sup> year IV sem
Subject	DATABASE MANAGEMENT SYSTEMS
Paper Name	DBMS
Paper Code	Paper DSC 407
Learning Outcomes	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>✓ Know the importance of databases.</li> <li>✓ Write query using structured query language.</li> <li>✓ Differentiate different database languages.</li> <li>✓ Understand different data models.</li> <li>✓ Understand E-R diagram and design databases.</li> </ul>
Faculty Name	Md.Reshma

Unit	Topic s	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit - I Title	Database Management System - File based system - Advantages of DBMS over file based system	<ul style="list-style-type: none"> <li>✓ Black board and chalk</li> <li>✓ PPT</li> <li>✓ ICT (Information Communication Technology) tools i.e., Laptops, Desktops, data projectors</li> </ul>	3
	Logical DBMS Architecture - Three level architecture of DBMS or logical DBMS architecture - Physical DBMS Architecture	Identification test for physical, logical, external views, Seminars.	3
	Database Administrator (DBA) Functions & Role - Data files indices and Data Dictionary	Demonstration method Database backup and recovery	2
	Relational and ER Models: Data Models – Relational keys, Relational constraints	Identification test for ER model, constraints	3
	Entity Relationship (ER) Model	Identification test for ER model, constraints Brain storming	2
	- Defining Relationship for College Database - ER Diagram - Conversion of E-R Diagram to Relational Database	Preparation of PPT for defining relationship for college database ,ICT tools	3

Unit-2 Title	Entity Relationship (ER) Model	Identification test for ER model, constraints Brain storming	2
	- Defining Relationship for College Database - ER Diagram - Conversion of E-R Diagram to Relational Database	Preparation of PPT for defining relationship for college database ,ICT tools	3
	DATABASE INTEGRITY AND NORMALISATION: Relational Database Integrity – The Keys - Referential Integrity - Entity Integrity -	PPT, ICT tools, Identification test for different keys.	3
	Redundancy and Associated Problem Normalization - The First Normal Form - The Second Normal Form	Seminars on redundancy and INF,2NF	3
	The Third Normal Form - Boyce Codd Normal Form - Attribute Preservation - Lossless join Decomposition	Brain storming, Demonstration on 3NF.	2
Unit-3 Title	STRUCTURES QUERY LANGUAGE (SQL):Meaning–SQL commands -Data Definition Language	Lecture method and PPT for SQL queries.	3
	- Data Manipulation Language, DCL and TCL commands	Lecture method and PPT for SQL queries.	4
	Queries using Order by – Where - Group by Nested Queries	Lecture method and PPT for SQL queries using group by, order by, nested queries.	3
	Joins – Views	Seminars on joins and views	2
	– Sequences - Indexes and Synonyms - Table Handling. Advanced SQL	Seminar on indexes and sequences,Advanced SQL	3

Unit-4 Title	Transactions – Concurrent Transactions -	Making students to do transactions in online, providing security for their transactions	2
	- Locking Protocol - Serialisable Schedules, Locks Two Phase Locking (2PL)	Demonstration method for serializable schedules and 2PL.	3
	Deadlock and its Prevention – Optimistic Concurrency Control	Quiz on Deadlock and its prevention.	2
	Database Recovery and Security: Database Recovery meaning - Kinds of failures - Failure controlling methods - Database errors	Session on distributed databases, client server architecture by lecture method and PPT	3
	Backup & Recovery Techniques	Seminar on backup and recovery	3
	Security & Integrity - Database Security – Authorization-Encryption,RAID	Group discussion on Database security and authorization.	3
Total Hours :			60

  
  
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# TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College TSWRDC(W)-MANCHEERLA

## SEMESTER PLAN

Names of the Course	B.Sc. Data Science, Sem II
Subject	Programming Computer Science
Paper Name	Problem Solving & Python Programming
Paper Code	
Learning Outcomes	<p>On completion of course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. develop algorithmic solutions to comp problems</li> <li>2. develop &amp; execute python programs.</li> <li>3. structure a python program into functions</li> <li>4. represent compound data using python lists, tuples &amp; dictionaries</li> <li>5. Read &amp; write data from/to files in Python Program</li> </ol> <p>To develop the skill of designing GUI in python.</p>
Faculty Name	Mrs Sumera Zeenath

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.	No. of Hours
Unit -1 Title Introduction to Computing & problem Solving. Control flow statements	Intro fundamentals of Computing Computing devices, algorithms pseudo code, flowcharts	Lecture, flipped class	04
	Variables, identifiers, python interpreter, operators.	Lecture, flipped class	03
	Dynamic & Strongly typed language, Type conversion	Lecture	02
	Control flow statements	Lecture, Online execution of programs.	05

Unit-2 Title	Built-in functions, Function Basics.	Lecture (black board), flipped class on scope & lifetime of variables	
Functions	Types of parameters, args & **kwargs	White board	01
Strings	Command line arguments	Lecture, usage on system	01
	Strings Creation & storage, string operations	Lecture, ppt	02
	accessing the string	flipped class by students	01
	string slicing, indexing, string methods	ppt, lecture, online editor usage	02
	Lab program	lab programs	06
			(15)
Unit-3 Title	List introduction, operations	Lecture, usage in online editor	02
Lists	list slicing, methods, loops	Lecture, flipped class, usage in online editor	05
Files & exception	mutability, aliasing, cloning lists, tuples introduction	Lecture	02
	Tuples, dictionaries	Lecture	03
	Advanced list processing	Lecture, flipped class	02
	Sorting techniques	flipped class on sorting execution lecture	04
	Files & exception	lab programs lecture	06 02



Unit-4 Title			
Object Oriented Programming	Classes & objects Creating classes in Python	Lecture, -flipped class on OOPS concepts	01
	Constructor, attributes, OOPS concepts	flipped class	03
	Polymorphism	Lecture	02
	Functional programming.	Iterators, generators	03
		Lab programs	03
			(12)
Unit-5 Title			
		Lab practicals	12
Total Hours			79.

  
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TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College : TSWRDCW, Mancharial

SEMESTER I PLAN

Name of the Course	MPCS-III, Sem-51
Subject	Web Technologies
Paper Name	Computer Science
Paper Code	
Learning Outcomes	Students will be able to: (i) Learn HTML Tags, CSS, JS & Functions (ii) Develop JavaScript programs (iii) How to design a web page & also forms. (iv) Learn what is Array, XML, DTF, XSLT & Ajax's.
Faculty Name	Zikron Syed

Unit I	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
	Introduction to XML	- Pre Test - Discussion - Blackboard, Projector (Tr) - MCQ's	10
	CSS (Cascading style sheets)	- Group Discussion - Blackboard, PPT's - Clip Test	12

Unit- 2 Title	Introduction to Javascript	<ul style="list-style-type: none"> <li>- Peer review</li> <li>- Group Discussion</li> <li>- Blackboard</li> <li>- Audio/Video Visual's</li> <li>- Slip Test</li> </ul>	12
	Functions	<ul style="list-style-type: none"> <li>- Collaboration</li> <li>- JIT</li> <li>- Blackboard</li> <li>- Short Questions</li> </ul>	08
Unit-3 Title	Arrays	<ul style="list-style-type: none"> <li>- Group Discussion</li> <li>- JIT</li> <li>- Blackboard, MCQ's</li> </ul>	06

	Events	<ul style="list-style-type: none"> <li>- Peer review</li> <li>- Questionnaire</li> <li>- Blackboard, short Questions</li> </ul>	08
	Java script Objects	<ul style="list-style-type: none"> <li>- Flipped class</li> <li>- Discussion</li> <li>- PPT's, Oral Quiz</li> </ul>	08
Unit 4 Title	XML & XSLT	<ul style="list-style-type: none"> <li>- Collaboration</li> <li>- Discussion</li> <li>- Audio/Video Visuals, MCQ's</li> </ul>	10
	Ajax	<ul style="list-style-type: none"> <li>* Peer review</li> <li>- JIT</li> <li>- Sharing/showing video, slipTest</li> </ul>	12
Total Hours:			86

Prepared By:

Zitron Syed  
22/1/24

Lecturer in Computer Science

Principal  
TSWRDC(W), MANCHESTER



# TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College TSWRDCCWJ, Maricherial

## SEMESTER PLAN

Names of the Course	B.COM CAI, SEM I
Subject	Fundamentals of Information Technology
Paper Name	FIT
Paper Code	DSC-103
Learning Outcomes	<ul style="list-style-type: none"> <li>→ Student's learn basic knowledge of Computer</li> <li>→ Acquire knowledge about different generations history, characteristics, applications - etc.</li> <li>→ Get an awareness on different I/O devices their usage</li> <li>→ Gain the knowledge of different components of Computer like I/O, CPU, memory and its categories</li> <li>→ Learn S/W &amp; H/W; Operating System &amp; its function</li> <li>→ Practice Number System and its Conversion</li> <li>→ Gain the knowledge of all fundamentals of IT</li> </ul>
Faculty Name	B. JYOTHI .

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit -1 Title Introduction to Computers	Introduction to Computer: → characteristics & history Block diagram, classification	-- Black board & chalk -- Quiz	08
	→ Generations, applications → capabilities & limitations	-- Discussion, Blackboard	04
	→ Role of I/O devices in a Computer system: I/P units	-- slide show (online PPT's) -- Projector	02
	O/P units and its types	-- Projector -- Audio video visuals.	03

Computer Arithmetic & Storage Fundamentals.

Unit-2 Title	Number System: Positional & Non-positional	-- Black board & chalk. -- Audio-video visuals	01
	Number Systems: Binary, Octal, decimal, Hexadecimal.	-- worksheet of MCQs.	03
	Converting from one number system to another number system.	-- Quiz	04
	Memory storage:	-- Explanation	} 02
	Primary vs Secondary storage devices.	-- Projector.	
	Data storage & retrieval methods.		02
	Different primary storage devices	-- Audio-video visuals.	04
	Different secondary storage devices.		

Software.

Unit-3 Title	Introduction to Software	-- Black board & chalk	01
	Types of e/w: System Software.	-- Lecture	} 02
	Operating System, Programming languages	-- Online PPT's	
	Application Software		} 05
	Word processing, Spreadsheets, Graphics	-- MS-Word 2016 (Projector) -- MS-Excel 2016.	
	presentation s/w, DBMS s/w.	-- MS-Powerpoint 2016 -- MS-Access	
	MS-DOS and its commands.		

Unit-4 Title	Operating System	Introduction to Operating System	-- Projector, Questionnaire	01
		Measuring System Performance	-- Peer review, Lecture	01
		Concept of Translators: Compiler, Assembler, Interpreter	-- Black board	01
		Different types of OS +		
		→ Batch processing → Multi programming	-- Explanation, Discussion	} 04
		→ Multi tasking → Multi processing		
		→ Time sharing	-- Slides, Questionnaire	
		→ MS-DOS, → Windows, Unix, Linux.	-- Projector, practical session -- Windows OS, Command prompt	} 04
			-- Assessment Test	
		Unit-5 Title	Data Communication	Data Communication and its process.
→ Basic Networking devices, Communication Process.	-- Black board & chalk.			02
→ Transmission modes, Speed & media.	Diagrammatic representation -- Visuals online			02
→ Modem, its working & characteristics.	-- Quiz/buzz session.			02
→ Types of Networks → Network types & N/w topologies.	-- Audio, video visuals -- Assessment on Topologies			} 04
→ Computer protocols → Network concepts.	-- Explanation.			01
Theory - 65 + Practical - 25 ⇒				Total Hours :



TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College T.S.W.R.D.C.W. Mancherial

SEMESTER PLAN

Names of the Course	B.COM CAI, SEM II
Subject	Programming with C & C++ (Computer Science)
Paper Name	Programming with C & C++
Paper Code	DSC 203
Learning Outcomes	<p>→ The objective of this subject is to learn the students about the following concepts of C &amp; C++.</p> <ul style="list-style-type: none"> <li>→ C-Tokens, control structures,</li> <li>→ Functions, Arrays, strings</li> <li>→ Pointers, structures &amp; unions</li> <li>→ Object Oriented Programming concepts using C++</li> <li>→ How to write and execute all the above topics in an Editor.</li> </ul>
Faculty Name	B. JYOTHI

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit -1 Title	Introduction to 'c' language	Lecture method, Blackboard & chalk	01
Introduction to 'C'-language.	C-TOKENS: variables, constants, Identifiers, keywords,	Projector	10
	Data types & Operators	Blackboard & chalk	05
	Revision.	Worksheet of MCQs	01



Unit-2 Title	(i) Conditional & Jumping statements	Projector	
	→ If statement	DevC++ editor /	02
	→ If-else		
	→ If else if, nested if	TurboC++ editor.	02
	→ break, continue	Blackboard & chalk.	01
→ go.to & switch.			
Working with control statements & LOOPS.	(ii) Looping & Its statements	Projector.	} 03
	→ Introduction	DevC++ / TurboC++ editor	
	→ While		
	→ do-while, for, Nested loop.	Blackboard & chalk.	
	Revision & slip test	Slip test of Programs writing.	01
Unit-3 Title	(i) Functions:	Blackboard & chalk	09
	→ Def, declaration,		
	→ Function prototype, return, types of function		
	→ System defined & User defined.	Program execution in TurboC++ editor through	09
	(ii) Arrays	Projector.	03
→ Types of Arrays.			
(iii) Strings		08	
Revision & slip test	Oral test, Test on Programs writing.	02	

Total Hours

Unit-4 Title			
Unit-4 Pointers, Structures & Unions.	(i) Pointers :	Blackboard & chalk.	03
	→ Features of Pointers		
	→ Declaration of Pointers		
	→ Arithmetic operations with pointers		
	(ii) Structures :	Online PPT's	04
	features, declaring, initialization, structures within structures.		
	(iii) Unions :	Flipped class.	02
	→ Definition, declaration		
	→ Comparison between structures & unions.		02
	Revision & slip test	Discussion, slip test.	02
Unit-5 Title	(i) Object oriented Programming	Blackboard & chalk	01
	→ Introduction to OOP	Program execution in DevC++/TurboC++ editor	02
	→ Structure of C++		
	→ Storage classes	Discussion	02
	→ Similarities & differences b/w C & C++		
	→ Data members, member functions.		01
(ii) OOP's Concepts : class, object, Inheritance, Polymorphism, Encapsulation, Abstraction	Online PPT's through Projector.	05	
Revision & slip test		01	
Theory - 65 + Practical - 25			90
Total Hours			

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Name of the College : TSWRDCW, Mancherla

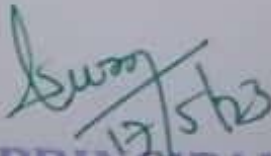
SEMESTER - PLAN

Name of the Course	B.COM - CA-II, Gen III
Subject	Relational Computer Science
Paper Name	Relational Database Management System
Paper Code	DSC - 303
Learning Outcomes	<ul style="list-style-type: none"> <li>- Students learn a concept of data organization i.e. Database approach, DBMS &amp; RDBMS.</li> <li>- Learn different Data models and their purpose in designing a database.</li> <li>- Concept of Normalization to remove anomalies</li> <li>- Creation of a Database using SQL</li> <li>- Concept of DDBMS &amp; Client-Server architecture</li> </ul>
Faculty Name	B. Jyothi

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Introduction to DBMS	→ Database approach	Lecture method, Blackboard	01
	→ File concept v/s DBMS	& chalk	01
	→ Three-level architecture	Flipped session	01
	→ Data models		01
	→ DBA, functions & Role	Discussion	02
	→ Entity Relationship model and its components	Peer group	01
	→ Relational constraints Key, Conversion ERD to Relational model	Sleep test	01
			02

Unit II Database Integrity and Normalization	→ Relational database Integrity & Keys	Lecture method, Blackboard & chalk.	02
	→ Concept of Normalization	Quiz.	02
	→ File Organization & Types of File organization	Flipped class.	} 06
	→ Types of Indexes & Tree structure	Discussion	
	→ Multikkey file organization	Questionnaire	
	→ Multilist file organization → Inverted file organization	Slip test	02
Unit-III Title Structured Query Language (SQL)	→ SQL and SQL-Commands DDL, DML, DCL & DTCCL.	Computer (Oracle or MySQL S/w's)	[ 04
	→ Table handling.		] 02
	→ Queries using Orderby, Groupby, where clause	Blackboard & chalk	
	→ SQL Indexes, Synonyms → concept of Nested-queries. → Joins, views, Sequences.	Mini project (small database) viva (Oral test)	} 02
	→ SQL-Operators, functions, Aggregate functions.	Worksheet of MCQ's	02
			01
Unit-Title IV	Transaction and Transaction Management	Blackboard & chalk	02

Transactions and Concurrency Management	→ Locking Mechanisms → Locking protocol → 2PL	Blackboard & chalk	02
	→ Serializability → Concurrency and its control method @ .	Lecture method .	02
	→ Concept of Database Security		01
Transactions and Concurrency Management	→ Concept of Database Recovery → Database errors @ → Backup & recovery techniques .	Discussion .	02
			01
Unit V Distributed and Client Server database	→ Concept of DDBMS, features Architecture, advantage @ and disadvantages .	flipped class .	02
	→ Concept of Data distribution, Data Replication, Data fragmentation,	Worksheet of MCQ's quiz .	02
	→ Client Server Databases .		03
	Advanced topics: Parallel DB, Multimedia DB, Mobile DB, WebDB, NoSQL, Datawarehouse...	Grand test	04
Practical - 20		Total Hours:	75

  
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Name of the College TSWRDCCWD, Mancherial

## SEMESTER PLAN

Names of the Course	B.COM IIA II, SEM IV
Subject	Computer Science
Paper Name	Web Technologies.
Paper Code	DSC-403
Learning Outcomes	<p>-- Students learn the basics of how to create a webpage and its designing through Hypertext Markup language, DHTML, CSS, PHP, XML &amp; JSP scripting languages.</p> <p>-- They gain knowledge of how a website is designed and all links are established.</p> <p>-- Can design a small website which consists no. of webpages and its content.</p>
Faculty Name	B. Jyothi

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit -1 Title Introduction to HTML	1. Art of creating a web site	- Blackboard & chalk - Projector (Notepad & web browsers s/w's)	04
	2. Basic tags of HTML	- Discussion	04
	3. Form & Formulation elements	- Graphical representation	04
	4. Tags to design a webpage.	- Discussion & Explanation - Mini project on webpage development	03

An Overview of Dynamic Webpages & Dynamic Webpage.

Unit-2 Title	1. Overview of Dynamic web pages & web page technologies	- Blackboard & chalk	03
	2. Cascading style sheets (CSS)	- Projector (Notepad & Google chrome)	02
	3. Events handling	- Youtube videos (HTML Tutorials)	03
	4. Dynamic changing elements	- slip test	02
	5. Text Graphics and placements	- Flipped & Buzz session - PPT's (Online Slideshow)	03
	6. Creating Multimedia effects	- Peer team - webpage development	02

Java script & Events and Event handling

Unit-3 Title	1. JavaScript	- Explanation, Quiz test - Projector / screen share	03
	→ client side & server side javascript	- Notepad & Google chrome	02
	→ JavaScript tokens	- Youtube videos	
	→ Functions, objects, Arrays DOM & event handling	- Seminar - Web development	04
	2. Events & Event handlers	- Blackboard & chalk	03
	→ Types of events	- Discussion, Flipped - slip test	02
		- Worksheet (MCQ's)	01

Unit Title	Content	Assessment	Weightage
Hypertext Preprocessor (PHP)	1: Introduction to PHP	- Projector (Notepad) & Web browser and Web servers (XAMP/WAMP)	02
	→ PHP Tags		03
	→ PHP Control Structures		
	→ Arrays, Strings, Functions	Youtube video (PHP Tutorial for beginners)	02
	→ Web form controls		
	→ Connecting to database (MySQL)	- Explanation	01
	→ Creating & implementing		
	→ Handling results	- Flipped @lip test	02
	→ Handling sessions and cookies	- Web development activity	02
	2: File handling in PHP	- Oral test	01
→ File handling operations	- Discussion	03	
→ Binary files & listing directories	- Peer group & Quiz session	02	
Extensible Markup Language (XML) & JSP	1: Extensible Markup Language (XML)	- Blackboard & chalk	03
	→ XML documents		
	→ XML style sheets	- PPTs (slideshare.com)	02
	→ Document Object Model (DOM)		
	→ XML Query language.	- Worksheet (Fill in the blanks/MCQ's)	03
	2: Java Server Page (JSP)	- Seminar / short Seminar	03
	→ Anatomy of JSP page, processing, declarations etc	- Quiz / Interactive session	03
→ Using Beans in JSP page			
→ Cookies & Session			
→ Connecting to database in JSP			
Theory (50) + Practical (10)			60

  
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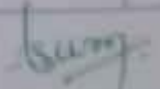
## TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College : TSWRDCW, Mancherla

## SEMESTER - PLAN

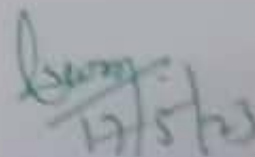
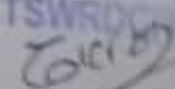
Name of the Course	BCOM (CA) - II
Subject (Paper Name)	E-COMMERCE, Sem - I
Paper Name (Subject)	Computer Science
Paper Code	DSE 5036
Learning Outcomes	<ul style="list-style-type: none"> <li>- Identify the components parts of E-commerce</li> <li>- Identify benefits of getting online</li> <li>- Understand the risks and cyber security when trading and doing business online</li> </ul>
Faculty Name	Zikran Syed

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
I	Introduction to E-commerce	Questionnaire, Black board & projector, MCQ's	06
	Classification & Application of E-commerce	Discussion, projector Video's (online) short seminar	06

  
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<u>Unit 3</u>	Consumer Oriented Applications	Discussion, PPT's, MICO's	08
	Electronic Fund Transfer	Group Discussion, Blackboard, Slip Test	08
Unit- 2 Title	Framework of E-commerce	<ul style="list-style-type: none"> <li>- Peer review</li> <li>- Discussion</li> <li>- Blackboard, Projector</li> <li>- MICO's, Seminar</li> </ul>	08
	Data Encryption	<ul style="list-style-type: none"> <li>- Flipped class</li> <li>- PPT's</li> <li>- Assignment</li> </ul>	04
	Digital Signatures	<ul style="list-style-type: none"> <li>- JIT</li> <li>- Questionnaire</li> <li>- Slip Test</li> </ul>	02
Unit- Title			

Unit 4	Electronic Data Interchange	Collaboration, PPT, short questions	04
	EDI & E-commerce	Group Discussion, Blackboard, MCQ's	06
Unit 5 Title	E-marketing Techniques	Peer review, PPT MCQ's shared	06
	5p's	Discussion, Blackboard Quiz Test	06
		T-64 P-16	
<u>80</u> Total Hours:			62 80

  
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TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College: TSWRDCW, Mancherial

SEMESTER - PLAN

Name of the Course	B.COM CA III, Sem-VI
Subject	Computer Science
Paper Name	Cyber Security
Paper Code	
Learning Outcomes	By this subject, students learn, acquire & understand following topics: <ul style="list-style-type: none"> <li>➤ Cyber security detections</li> <li>➤ Network Security, Cyber Threats</li> <li>➤ Cyber space and the Law</li> <li>➤ Cyber Forensics</li> </ul>
Faculty Name	Zikran Syed

Unit	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.	No. of Hours
Unit-1 Title Introduction to cyber security	Introduction to Cyber security	Black Board & chalk	01
	Cybersecurity Vulnerabilities	Lecture	06
	Cybersecurity Safeguards	Projector{slide share{online}}	07
Unit-2 Title Securing web applications, services and server	<ul style="list-style-type: none"> <li>➤ Introduction to Cyber security</li> <li>➤ Basic security for HTTP &amp; SOAP services</li> <li>➤ Identify management and web services</li> <li>➤ Authorization Patterns</li> <li>➤ Security consideration</li> </ul>	Lecture Questionnaire Black board & chalk Slide share (online) Slip test	01 02 02 03 02
Unit-3 Title Intrusion detection and prevention	Introduction and Intrusion detection system Malware and Anti malware software	Flipped mode Blackboard & chalk	03 03

	Intrusion prevention system(IPS) & types		03
	Security Information system(management)	Online PPTs(through projector)	04
	Network session Analysis		02
	System integrity validation		02
Unit-4	Introduction to cryptography	Audio video visuals in lab	02
Title	Overview firewall types	Oral test	06
Cryptography & n/w security	Security protocols-VPN, PGP, SSL, TLS	Slip test	03
Unit-5	Introduction to cyberspace & law	Blackboard & chalk, Audio video Visuals	06
Title	Cyberspace and the law cyber forensics	Cyber forensics	06
		Online PPTs(projector/Computer)	06
Total Hours :			90

*Swamy*  
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# TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGES

Name of the College TSWRDC (W), Mancherla

## SEMESTER PLAN

Names of the Course	B. Sc (CIS)-2, SEM-3 B.Sc (MPC <sub>3</sub> -II) - SEM 3
Subject	Computers Science
Paper Name	Data Structures Using C++
Paper Code	
Learning Outcomes	<ul style="list-style-type: none"> <li>--Students learn the concept of Data and organisation of data.</li> <li>--learn the concepts of Algorithm and analysis of Algorithm.</li> <li>--Learn and compare the similarities and differences among different data structures namely Arrays, Stack, Queue, Linked lists, Tree and graph.</li> <li>--They learn and differentiate Sorting and searching techniques.</li> <li>--Learn the concept of Hashing and Heap.</li> <li>--Students are able to create and execute different data structure programs.</li> </ul>
Faculty Name	B.Jyothi

	Topics	Teaching Pedagogy, Teaching Aids, Curricular, Extra-curricular Activities etc.,	No. of Hours
Unit -1 Title	1.Introduction to the Data Structures, types and implementation	--PPT's, Projector.	03
	2.Introduction to Algorithms and Pseudocode	--Black Board, Discussion.	03
	3.Relationship among Data, Data Structures and Algorithms	--Explanation, Black Board.	01
	4.Analysis of Algorithms	--Explanation, Black Board.	02
	5.Concept of Stack (Stack editing, representation, applications and multiple stacks)	--Projector, Explanation, Note making, Practical execution.	05
	6.Expression, Evaluation and Conversion (Infix, prefix and post fix)	--Symbol representation, Black Board, Home assessment.	07
Unit-2 Title	1.Concept of Recursion (Recurrence, variants, recursive functions vs iteration)	--Black Board, Explanation, Slip test.	02

	2. Concept of Queues (Queue ADT, Realisation and applications )	--Short seminar, Discussion.	04
	3. Types of Queues (circular, priority, multi queue, dequeue)	--Flipped class, Discussion.	05
	4. Concept of Linked Lists (linked list ADT, variants and representation)	--PPT's, Group discussion.	02
	5. Types of Linked Lists (single, double, and circular)	--Slide sharing, Quiz.	05
	6. Linked Stack, Queue and Sparse matrix	--Audio, video visuals, MCQ's	03
Unit-3 Title	1. Introduction to Trees Concept (basic terms and types of trees)	--PPT's, peer discussion.	02
	2. Binary Tree (Binary tree ADT, Realisation, traversal and applications)	--Dev C++, Slip test.	03
	3. Binary Search Tree (BST, ADT and its operations)	--Slide sharing (online), group discussion.	03
	4. Concept of Threaded (single, double and operations)	--PPT's, worksheet.	03
	5. Concept of Searching Techniques (linear and binary)	--Dev C++, discussion.	03
	6. Concept of Sorting Techniques (selection, bubble, insertion, merge and quick)	--Audio, video visuals, Flipped class.	06
	7. Search Trees Symbol Table	--Graphical representation, Quiz.	03
	8. Concept of Optimal Binary Search Tree and AVL Tree	--Dev C++, Practical.	04
Unit-4 Title	1. Introduction to Graphs ( Terms and Representation)	--Slide sharing, Flipped class.	03
	2. Graph Traversal (depth first search, breadth first search )	--Audio, video visuals, Slip test.	04
	3. Spanning Tree (prims algorithm, Kruskal's algorithm )	--PPT's, Oral test.	03
	4. Concept of Hashing (key terms, issues ,hash functions, hash table)	--Projector, Short seminar.	03
	5. Collision Resolution Strategies	--PPT's, Peer group.	04
	6. Concept of Heaps (Heap ADT, Implementation, Heap sort and applications)	--Audi, video visuals, Slip test.	03
Total Hours :			90