



# VAGDEVI DEGREE COLLEGE

(Affiliated to Acharya Nagarjuna University)

(College Code : 116)

Ravipadu Road, Narasaraopet, Palnadu Dt, A.P., Ph : 9247025166

## Teaching Plan

Name of the Course with code : Programming in C, C++  
Class & Semester / Academic Year : B. Com (CA) & Semester - III/2023-24  
Name of the faculty Member : S.V. SRINIVASARAO

SNO	Topic	No. of periods required	Book(s) followed
<b>Unit-I : Introduction</b>			
1	Introduction - Structure of C program & C character set,	2	T1
2	Tokens: Constants, Variables, Keywords, Identifiers	3	T1
3	C data types	2	T1
4	C operators (arithmetic, relational, logical, increment and decrement)	4	T1
5	Standard I/O in C (scanf, printf)	2	T1
6	Conditional Control statements (if and Switch) Statements.	3	T1
Total of periods required:		<b>16</b>	
<b>Unit-II: Loops and Arrays</b>			
1	Repetitive statements: While, Do While and For Loops	3	T1
2	Use of Break and Continue Statements	2	T1
3	Arrays: Introduction & Types of arrays, one dimensional arrays	3	T1
4	Declaration of one dimensional arrays-Accessing array elements	3	T1
5	Storing values in an array	1	T1
6	-Two Dimensional Arrays Declaration of two dimensional arrays & Accessing array elements-	3	T1
7	Storing values in 2-D arrays.		T1
Total of periods required:		<b>15</b>	
<b>Unit-III : Strings and Functions</b>			
1	Strings: Definition, Declaration and Initialization of String Variables	2	T1
2	String Handling Functions	3	T1
3	Functions: Defining Functions	2	T1

4	Function Call	2	T1
5	passing parameters: Call By Value, Call By Reference.	2	T1
	Total of periods required:	<b>11</b>	
<b>Unit-IV: C++</b>			
1	Classes and Objects Introduction to OOP and its basic features	2	T1
2	C++ program structure	2	T1
3	Classes and objects	3	T1
4	Friend Functions	1	T1
5	Static Functions, Constructor	2	T1
6	Types of constructors ñ Destructors – Operators	3	T1
	Total of periods required:	<b>13</b>	
<b>Unit-V: Inheritance</b>			
1	Inheritance - Types of Inheritance	2	T1
2	Types of derivation, Public -Private - Protected	1	T1
3	Hierarchical Inheritance	3	T1
4	Multilevel Inheritance	2	T1
5	Multiple Inheritance - Hybrid Inheritance	2	T1
	Total of periods required:	<b>10</b>	
	<b>Grand total of periods required:</b>	<b>72</b>	

**Text Book:**

T1: Ron Mansfield, Working in Microsoft Office, Tata McGraw Hill(2008)

T2: Ed Bott, Woody Leonhard, Using Microsoft Office 2007, Pearson Education(2007)

**Reference Books:**

R1: Sanjay Saxsena,Microsoft Office,4.Microsoft Office, BPB PublicationsR2: Photoshop CC For Dummies" by Peter Bauer

R2: MS-Office , Kalyani Publishers.

**Faculty Signature**

**Head of the  
Department**



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## Teaching Plan

Name of the Course with code : DATABASE MANAGEMENT SYSTEMS  
Class & Semester / Academic Year : BSC & Semester - III / 2023-24  
Name of the faculty Member : S.V. SRINIVASARAO

SNO	Topic	No. of periods required	Book(s) followed
<b>Unit-I: Overview of Database Management System</b>			
1	Introduction to data, information, database	1	T1
2	database management systems	1	"
3	file-based system, Drawbacks of file-Based System	1	"
4	database approach	1	"
5	Classification of Database Management Systems	2	"
6	advantages of database approach	2	"
7	Various Data Models	2	"
8	Components of Database Management System	1	"
9	three schema architecture of data base	2	"
10	costs and risks of database approach	1	"
Total of periods required:		14	
<b>Unit-II: Entity-Relationship Model</b>			
1	Introduction, the building blocks of an entity relationship diagram	1	"
2	classification of entity sets	1	"
3	attribute classification	2	"
4	relationship degree	1	"
5	relationship classification	2	"
6	reducing ER diagram to tables	2	"
7	enhanced entity-relationship model(EER model)	1	"
8	generalization and specialization	1	"
9	IS A relationship and attribute inheritance, multiple inheritance	2	"
10	constraints on specialization and generalization	1	"

11	advantages of ER modelling	<b>1</b>	“
12	Total of periods required:	<b>15</b>	
<b>Unit-III: Relational Model</b>			
1	Introduction, CODD Rules	1	“
2	relational data model	2	“
3	concept of key	1	“
4	relational integrity	1	“
5	relational algebra, relational algebra operations	1	“
6	advantages of relational algebra	2	“
7	limitations of relational algebra	1	“
8	relational calculus, tuple relational calculus	1	“
9	domain relational Calculus (DRC)	1	“
10	Functional dependencies	2	“
11	normal forms upto 3rd normal form	3	<b>T2</b>
	Total of periods required:	<b>16</b>	“
<b>Unit-IV: Structured Query Language</b>			
1	Introduction, History of SQL Standard	1	“
2	Commands in SQL	2	“
3	Data Types in SQL	2	“
4	Data Definition Language	1	“
5	Selection Operation	1	“
6	Projection Operation	1	“
7	Aggregate functions	1	“
8	Data Manipulation Language, Table Modification Commands	2	“
9	Join Operation, Set Operations, View, Sub Query	<b>1</b>	“
	Total of periods required:	<b>12</b>	“
<b>Unit-V: PL/SQL</b>			
1	Introduction, Shortcomings of SQL	1	“
2	Structure of PL/SQL	1	“
3	PL/SQL Language Elements	1	“
4	Data Types	1	“
5	Operators Precedence	1	“
6	Control Structure	1	“
7	Steps to Create a PL/SQL	1	“
8	Program	1	“
9	Iterative Control	1	“
10	Procedure	2	“
11	Function	1	“
12	Database Triggers	1	“
13	Types of Triggers	2	“
	Total of periods required:	<b>15</b>	
<b>Grand total of periods required:</b>		<b>72</b>	

**Text Book:**

T1: Database System Concepts by Abraham Silberschatz, Henry Korth, and S. Sudarshan,  
McGrawhill

T2: Database Management Systems by Raghu Ramakrishnan, McGrawhill

**Reference Books:**

R1: Principles of Database Systems by J. D. Ullman

R2: Fundamentals of Database Systems by R. Elmasri and S. Navathe

**Faculty Signature**

**Head of the  
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