

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYURU.**

**An Autonomous college within the jurisdiction of Krishna University A.P, India.**

**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC 505C</b>	<b>2018-'19</b>	<b>B.Com.(C.A.)</b>
<b>SEMESTER – V</b>	<b>PAPER – V</b>	<b>Max. Marks 75</b>	

**Syllabus**

**PROGRAMMING IN C**

**NO Of Hours: 5**

**No Of Credits: 3**

**Pass Marks 30**

**Unit- I: Introduction to Algorithms and Programming Languages: 12 Hrs**

Algorithm – Key features of Algorithms – Some more Algorithms – Flow Charts.  
Introduction to C: Structure of C Program – Writing the first C Program – File used in C Program – Compiling and Executing C Programs Using Comments – Keywords – Identifiers – Basic Data Types in C – Variables Constants – I/O Statements in C- Operators in C- Programming Examples – Type Conversion and Type Casting

**Unit-II: Decision Control and Looping Statements 12 Hrs**

Introduction to Decision Control Statements – Conditional Branching Statements – Iterative Statements – Nested Loops – Break and Continue Statement – Go to Statement

**Unit- III: Functions 12 Hrs**

Introduction – using functions – Function declaration/ prototype – Function definition – function call – return statement – Passing parameters – Scope of variables – Storage Classes – Recursive function

**Unit- IV: Arrays 12 Hrs**

Introduction – Declaration of Arrays – Accessing elements of the Array – Storing Values in Array Calculating the length of the Array – Operations on Array – one dimensional array for inter-function communication – Two dimensional Arrays –Operations on Two Dimensional Arrays

**Strings:** Introduction String and Character functions

**Unit-V: Pointers: 12 Hrs**

Understanding Computer Memory – Introduction to Pointers – declaring Pointer Variables  
Passing Arguments to Functions using Pointer.

Structure, Union, and Enumerated Data Types: Introduction – Nested Structures – Unions – Enumerated Data Types.

**Reference Books:**

1. Reema Thareja, Introduction to C programming, Oxford University Press.
2. E Balagurusamy, Computing Fundamentals & C Programming – Tata McGraw-Hill, 2008.
3. Ashok N Kamthane, Programming with ANSI and Turbo C, Pearson Publisher, 2002.
4. Henry Mulish & Hubert L.Coo Reema Thareja: The Spirit of C: An Introduction to Modern Programming, Jaico Publishing House,1996.

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC 505C</b>	<b>2018-'19</b>	<b>B.Com.(C.A.)</b>
<b>SEMESTER – V</b>	<b>PAPER – V</b>	<b>Max. Marks 75</b>	

**Model Paper**

**PROGMAMMING IN C**

**Section- A**

Answer **FIVE** Questions. Each Question carries **FIVE** Marks.

**5\*5=25M**

1. Write a short note on Algorithm?
2. Explain data types in C?
3. Explain Jump Statements?
4. Write a short note on 'if' - statements?
5. Explain Call by Value and Call by Reference
6. Describe recursive function with an example?
7. Explain one dimensional array with example?
8. Write about pointers

**Section- B**

Answer **FIVE** the Questions. Each Question carries **TEN** Marks

**5\*10=50M**

9. Explain different types of programming languages?
10. Explain about different Categories of Operators in 'C'?
11. Explain Decision Making Looping statements with examples?
12. Explain different categories of functions?
13. Explain about Storage Classes?
14. Write about two dimension arrays? Give an example program?
15. Explain briefly about String function in 'C'?
16. Difference between Structures and Unions?

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

COMPUTER SCIENCE	CCSC 505C	2018-'19	B.Com.(C.A.)
SEMESTER – V	PAPER – V	Max. Marks 75	Pass Marks 30

Guidelines for paper setting '**PROGRAMMING IN C**'

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (essay questions)
Unit-1	2	2
Unit-2	2	2
Unit-3	2	2
Unit-4	1	1
Unit-5	1	1

- Each Short answer question carries 5 marks in Section –A
- Each Essay question carries 10 marks in Section –B
- The Question papers setters are requested to cover all the topics in the syllabus stipulated as per the weightage given by us

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**

An Autonomous college within the jurisdiction of Krishna University A.P, India.

(With Effect from Academic Year 2017-18)

<b>COMPUTER SCIENCE</b>	<b>CCSC-505P</b>	<b>2018-'19</b>	<b>B.Com.(C.A.)</b>
<b>SEMESTER – V</b>	<b>PAPER – III</b>	<b>Max. Marks 50</b>	<b>Pass Marks 25</b>

**LABLIST**

**PROGRAMMING IN C**

**No. of Hours per week: 2      External: 25      Internal: 25      Credits: 2**

1. Find out the given number is perfect number or not using c program.
2. Write a C program to check whether the given number is Armstrong or not.
3. Write a program to find roots of quadratic equation.  
Root 1 =  $(-b + \sqrt{b^2 - 4ac}) / 2a$       Root 2 =  $(-b - \sqrt{b^2 - 4ac}) / 2a$
4. Write a C program to find the sum of individual digits of a positive integer.
5. Write a C program to print the Fibonacci series
6. Write a C program to generate the first n terms of the Fibonacci sequence.
7. Write a program to find factorial of a given number using recursion
8. Write a program to perform all arithmetic operations using switch case
9. Write a C program to generate all the prime numbers between 1 and n, where n is a Value supplied by the user.
10. Write a C program to find both the largest and smallest number in a list of integers.
11. Write a C program that uses functions to perform the following:
  - a. Addition of Two Matrices
  - b. Multiplication of Two Matrices
12. Write a program to perform various string operations
13. Write a program to swap two numbers using pointers.
14. Write C program that implements searching of given item in a given list
15. Write a C program to sort a given list of integers in ascending order

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC 506C</b>	<b>2018-'19</b>	<b>B.Com.(C.A.)</b>
-------------------------	------------------	-----------------	---------------------

**SEMESTER – V**

**PAPER – VI**

**Max. Marks 75**

**Syllabus**

**DATA BASE MANAGEMENT SYSTEMS**

**NO Of Hours: 5**

**No Of Credits: 3**

**Pass Marks 30**

**Course Objective:** Design & develop database for large volumes & varieties of data with optimized data processing techniques.

**Unit – 1: Database Systems Introduction**

**12Hrs**

*Database Systems:* Introducing the database and DBMS, Why the database is important, *Historical Roots:* Files and File Systems, Problems with File System, Data Management, Database Systems. *Data Models:* The importance of Data models, Data Model Basic Building Blocks, The evaluation of Data Models.

**Unit - II: Relational Database & Data Modelling**

**12 Hrs**

*The Relational Database Model:* A logical view of Data, Keys, Integrity Rules, Relational Set Operators, Indexes, Codd’s relational database rules. *Entity Relationship Model:* The ER Model

*Advanced Data Modelling:* The Extended Entity Relationship Model, Entity clustering.

**Unit-III: Normalization and Database Design**

**14 Hrs**

*Normalization of database tables:* Database Tables and Normalization, The need for Normalization, The Normalization Process, High level Normal Forms, Normalization and database design, de normalization.

**Unit-IV: Structured Query Language**

**12 Hrs**

*Introduction to SQL:* Data Definition Commands, Data Manipulation Commands, Select queries, Advanced Data Definition Commands, Advanced Select queries, Virtual Tables, SQL Join Operators,

**Unit-V: Procedural SQL**

**10 Hrs**

*Introduction to PL/SQL :* Triggers, Stored Procedures, PL/ SQL Stored Functions

**Prescribed Text Book:**

- 1. Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007).**

**Reference Books:**

1. Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley
2. Raman A Mata – Toledo/Panline K Cushman, Database Management Systems, Schaum’s Outlibe series, Tata McGraw Hill (2007).
3. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight edition, Pearson Education (2006).
4. “DatabaseSystemConcepts” by AbrahamSilberschatz, Henry Korth, and S.Sudarshan, McGrawhill
5. Atul Kahate, Introduction to Database Management Systems, Pearson Education (2006).

**Student Activity:**

1. Create your college database for placement purpose.
2. Create faculty database of your college with their academic performance scores

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC 506C</b>	<b>2018-'19</b>	<b>B.Com.(C.A.)</b>
-------------------------	------------------	-----------------	---------------------

**SEMESTER – V**

**PAPER – VI**

**Max. Marks 75**

**Model Paper**

**DATA BASE MANAGEMENT SYSTEMS**

**NO Of Hours: 5**

**No Of Credits: 3**

**Pass Marks 30**

**Section-A**

Answer any **FIVE** Questions. Each question carries **FIVE** Marks

**4x5=25M**

1. Explain the Components of Database System.
2. Explain Entity Relationship Model .
3. Write about Relational Set Operators.
4. Explain Integrity rules.
5. Describe BCNF.
6. Write about D Normalization.
7. Write about Special Functions.
8. Explain Stored Procedures.

**Section-B**

Answer any **FIVE** Questions. Each question carries **TEN** Marks

**5X10=50M**

9. What is File? Explain the problems with File system
10. Explain any three different Data Models
11. Explain E.F.CODDs' rules.
12. Explain Extended Entity Relationship Model.
13. Explain the concept of Normal Forms.
14. Explain different join operators
15. Explain DDL and DML commands.
16. Explain about triggers.

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

COMPUTER SCIENCE	CCSC 506C	2018-'19	B.Com.(C.A.)
SEMESTER – V	PAPER – VI	Max. Marks 75	Pass Marks 30

Guidelines for paper setting '**DATA BASE MANAGEMENT SYSTEMS**'

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (essay questions)
Unit-1	2	2
Unit-2	2	2
Unit-3	2	2
Unit-4	1	1
Unit-5	1	1

- Each Short answer question carries 5 marks in Section –A
- Each Essay question carries 10 marks in Section –B
- The Question papers setters are requested to cover all the topics in the syllabus stipulated as per the weightage given by us

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYURU.**

An Autonomous college within the jurisdiction of Krishna University A.P, India.

(With Effect from Academic Year 2018-'19)

<b>COMPUTER SCIENCE</b>	<b>CCSC-506P</b>	<b>2018-'19</b>	<b>B.Com(CA)</b>
-------------------------	------------------	-----------------	------------------

**SEMESTER – V**

**PAPER – IV**

**Max. Marks 50**

**Lab List**

**DATA BASE MANAGEMENT SYSTEMS**

**Pass Marks 25**

**No. of Hours per week: 2**

**External: 25**

**Internal: 25**

**Credits: 2**

1. Creation of college database and establish relationships between tables
2. Explain various data type in Oracle.
3. Show the structure of the Emp table.
4. Show the structure of the DEPT table.
5. Explain the syntax of SELECT statement.
6. Create a query to display the name, job, hiredate and employee number from emp table.
7. Create a query to display unique jobs from the emp table.
8. Create a query to display the empno as EMP#, ename as EMPLOYEE and Hire\_date from emp.
9. Create a query to display all the data from the EMP table. Separate each column by a comma and name the column THE\_OUTPUT.
10. Create a query to display the name and salary of employees earning more than 2850.
11. Create a query to display the name and salary for all employees whose salary is not in the range of 1500 and 2850.
12. Display the employee name, job and start date of employees hired between February 20, 1981 and May 1, 1981. Order the query in ascending order of start date
13. Display the employee name and department number of all the employees in departments 10 and 30 in alphabetical order by name.
14. List the name and salary of employees who earn more than 1500 & are in department 10 or 30.
15. Display the name, salary and commissions and sort data in descending order of salary and commission.
16. Display the name and job title of all employees who do not have a manager.
17. Display the name, job and salary for all employees whose job is Clerk or Analyst and their salary is not equal to 1000, 3000 or 5000.
18. Display the names of all employees where the third letter of their name is an 'A'.
19. Display the names of all employees who have two 'L's in their name and are in department 30 or their manager is 7782.
20. Display the name, salary and commission for all employees whose commission amount is greater than their salary increased by 10%.
21. Explain all the character functions.
22. Explain all the number functions.
23. Explain all the Date functions.

Create Student database using the following tables.

STUDENT: Sno : primary key, number Sname : NOT NULL, varchar2 Address:

Varchar2



COURSE: Sno : Foreign key. Course Name : varchar2

Queries:

1. Alter table by adding a column fees in table COURSE.
2. Alter table by modifying the address to VARCHAR2(20)
3. Create a view on which the students who joined in one course only.

### **PL/SQL.**

1. Write A Pl/Sql Program To Swap Two Numbers Without Using Third Variable.
2. Write A Pl/Sql Program To Generate Multiplication Tables For Numbers 2,4 And 6
3. Write A Pl/Sql Program To Display Sum Of Even Numbers And Sum Of Odd Numbers In The Given Range.
4. Write A Pl/Sql Program To Check The Given Number Is Pollinndrome Or Not.
5. Write A Pl/Sql Program To Display Top 10 Rows In Emp Table Based On Their Job And Salary.

### **Reference Books:**

1. Oracle Pl/Sql By Example. Benjamin Rosenzweig, Elena Silvestrova, Pearsoneducation 3rd Edition
2. Sql & Pl/Sql For Oracle 10g, Black Book, Dr.P.S. Deshpande

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC-507C</b>	<b>2018-'19</b>	<b>B.Com.(CA)</b>
<b>SEMESTER – V</b>	<b>PAPER – VIII</b>	<b>Max. Marks 75</b>	

**Syllabus**

**WEB TECHNOLOGIES**

**NO Of Hours: 5**

**No of Credits: 3**

**Pass Marks 30**

**Unit -I Introduction to XHTML:**

Introduction to HTML, Basic html, Document body text, Hyper links, Adding more formatting Lists, Tables, Images, Multimedia Objects, Frames, Forms and XHTML.

**Unit- II: CSS:**

Cascading Style Sheets: Introduction, Defining your own styles, properties and values in styles, Formatting blocks of information, Layers.

Java Script: java Script, the basics, Variables, String Manipulations, Mathematical functions, Statements, Operators, Arrays, Functions.

**Unit –III: Objects in Java Script & Dynamic HTML with Java Script**

*Objects in Java Script:* Data and objects in java script, Regular expressions, Exception Handling, Built in objects, Events.

*Dynamic HTML with Java Script:* Data validation, Opening a new window, Messages and Confirmations, The status bar, Writing to a different frame, Rollover buttons, Moving images, Multiple pages in a single download, A text-only menu system, Floating logos.

**Unit –IV: XML Defining Data for Web Applications**

*XML:* Introduction to XML, Basic XML, document type definition, XML Schema, Document object model, presenting XML, Using XML parser.

**Unit -V: JSP:**

JSP Lifecycle, Basic Syntax, EL (Expression Language), EL Syntax, Using EL Variables

**Prescribed Books:**

- 1. Chris Bates, Web Programming Building Internet Application, Second Edition, Wiley**  
2. Head First Servlets and JSP 2<sup>nd</sup> Edition, Bryan Basham, Kathy Sierra
2. Uttam Kumar Roy, Web Technologies from Oxford University Press

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

<b>COMPUTER SCIENCE</b>	<b>CCSC-507C</b>	<b>2018-'19</b>	<b>B.Com(CA)</b>
-------------------------	------------------	-----------------	------------------

**SEMESTER – V**

**PAPER – VIII**

**Max. Marks 75**

**Model Paper**

**WEB TECHNOLOGIES**

**No of Credits: 3**

**Pass Marks 30**

**Section-A**

Answer **FIVE** Questions. Each Question carries **FIVE** Marks.

5 X 5=25M

1. Write about structure of HTML Document with an example
2. Explain about lists in HTML
3. Write about properties used in Style Sheet
4. Write about arrays in Java Script
5. Describe Data Object
6. Write about Rollover buttons
7. Describe XML Elements
8. Write the syntax of EL and EL variables

**Section-B**

Answer **FIVE** Questions. Each Question carries **TEN** Marks.

5 X 10=50M

9. Explain about hyper links? Write about how to link another pages
10. What is Form? Explain about forms with examples
11. What is CSS? How to design Cascading style sheet
12. Explain about Mathematical Functions
13. Explain about Regular Expressions
14. Write about Data validations in DHTML
15. Explain about Document Object Model
16. Explain about JSP Lifecycle with neat diagram

**AG & SG SIDDHARTHA COLLEGE OF ARTS AND SCIENCES - VUYYURU.**  
**An Autonomous college within the jurisdiction of Krishna University A.P, India.**  
**(With Effect from Academic Year 2018-'19)**

COMPUTER SCIENCE	CCSC-507C	2018-'19	B.Com(CA)
------------------	-----------	----------	-----------

SEMESTER – VI

PAPER – VIII

Max. Marks 75

Pass Marks 30

Guidelines for paper setting '**WEB TECHNOLOGIES**'

Unit wise weightage of Marks

	Section-A (Short answer questions)	Section-B (essay questions)
Unit-1	2	2
Unit-2	2	2
Unit-3	1	2
Unit-4	2	1
Unit-5	1	1

- Each Short answer question carries 5 marks in Section –A
- Each Essay question carries 10 marks in Section –B
- The Question papers setters are requested to cover all the topics in the syllabus stipulated as per the weightage given by us