

**SPACES DEGREE COLLEGE, PAYAKARAOPETA**

**DEPT. OF COMPUTER SCIENCE**

**B.Sc SEMESTER-I**

**COURSE CODE : C1**

**COURSE TITLE: PROBLEM SOLVING IN C**

**Course Objective:**

This course aims to provide exposure to problem-solving through programming. It introduces the concepts of the C Programming language.

**Course Learning Outcomes:**

Upon successful completion of the course, a student will be able to:

- CO 1. Understand the evolution and functionality of a Digital Computer.
- CO 2. Apply logical skills to analyse a given problem
- CO 3. Develop an algorithm for solving a given problem.
- CO 4. Understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.
- CO 5. Apply 'C' language constructs to the algorithms to write a 'C' language program.

**B.Sc SEMESTER-II**

**COURSE CODE : C2**

**COURSE TITLE: DATA STRUCTURE USING C**

**Course Objectives:**

To introduce the fundamental concept of data structures and to emphasize the importance of various data structures in developing and implementing efficient algorithms.

**Course Learning Outcomes:**

Upon successful completion of the course, a student will be able to:

- CO 1. Understand available Data Structures for data storage and processing.
- CO2. Comprehend Data Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph
- CO3. Choose a suitable Data Structures for an application
- CO4. Develop ability to implement different Sorting and Search methods
- CO5. Have knowledge on Data Structures basic operations like insert, delete, search, update and traversal
- CO6. Design and develop programs using various data structures
- CO7. Implement the applications of algorithms for sorting, pattern matching etc.



  
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**B.Sc SEMESTER-III**

**COURSE CODE : C3**

**COURSE TITLE: DATABASE MANAGEMENT SYSTEMS**

**Course Objective:**

The objective of the course is to introduce the design and development of databases with special emphasis on relational databases.

**Course Learning Outcomes:**

On completing the subject, students will be able to:

- CO1. Gain knowledge of Database and DBMS.
- CO2. Understand the fundamental concepts of DBMS with special emphasis on relational data model.
- CO3. Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database
- CO4. Model database using ER Diagrams and design database schemas based on the model.
- CO5. Create a small database using SQL.
- CO6. Store, Retrieve data in database.

**B.Sc. SEMESTER-IV**

**COURSE CODE: C4**

**COURSE TITLE: OBJECT ORIENTED PROGRAMMING THROUGH JAVA**

**Course Objective:**

To introduce the fundamental concepts of Object-Oriented programming and to design & implement object oriented programming concepts in Java.

**Course Learning Outcomes:**

At the end of this course student will:

- CO1. Understand the benefits of a well-structured program
- CO2. Understand different computer programming paradigms
- CO3. Understand underlying principles of Object-Oriented Programming in Java
- CO4. Develop problem-solving and programming skills using OOP concepts
- CO5. Develop the ability to solve real-world problems through software development in high-level programming language like Java.



  
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**B.Sc. SEMESTER-IV**

**COURSE CODE: C5**

**COURSE TITLE: OPERATING SYSTEMS**

**Course Objective:**

This course aims to introduce the structure and organization of a file system. It emphasizes various functions of an operating system like memory management, process management, device management, etc.

**Course Learning Outcomes:**

Upon successful completion of the course, a student will be able to:

- CO1. Know Computer system resources and the role of operating system in resource management with algorithms
- CO2. Understand Operating System Architectural design and its services.
- CO3. Gain knowledge of various types of operating systems including Unix and Android.
- CO4. Understand various process management concepts including scheduling, synchronization, and deadlocks.
- CO5. Have a basic knowledge about multithreading.
- CO6. Comprehend different approaches for memory management.
- CO7. Understand and identify potential threats to operating systems and the security features design to guard against them.
- CO8. Specify objectives of modern operating systems and describe how operating systems have evolved over time.
- CO9. Describe the functions of a contemporary operating system.



  
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**B.Sc SEMESTER-V**

**COURSE CODE : C 6A**

**COURSE TITLE: Web Interface Designing Technologies**

**Course Objective:**

- CO 1. Understand and appreciate the web architecture and services.
- CO 2. Gain knowledge about various components of a website.
- CO3. Demonstrate skills regarding creation of a static website and an interface to dynamic website.
- CO 4. Learn how to install word press and gain the knowledge of installing various pluginsto use in their websites.

**B.Sc SEMESTER-V**

**COURSE CODE : C 7A**

**COURSE TITLE: Web Applications Development using PHP& MYSQL**

**Course Objective:**

Students after successful completion of the course will be able to:

- CO 1. Write simple programs in PHP.
- CO 2. Understand how to use regular expressions, handle exceptions, and validate data usingPHP.
- CO 3. Apply In-Built functions and Create User defined functions in PHP programming.
- CO 4. Write PHP scripts to handle HTML forms.
- CO 5. Write programs to create dynamic and interactive web based applications using PHPand MYSQL.
- CO 6. Know how to use PHP with a MySQL database and can write database driven webpages.



  
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