SVD Government Degree College (W), Nidadavole

Department of Computer Science

<u>Course Outcomes</u>

CBCS / Semester System (w.e.f. 2020-21 Admitted Batch)

of

I Semester: Computer Science –I
Problem Solving in C

II Semester Computer Science-II
Data Structures Using C

III Semester: Computer Science –III
Database Management Systems

IV Semester: Computer Science – IV (A)
Object Oriented Programming Using Java

IV Semester: Computer Science – IV (B)
Operating Systems

I Semester: Computer Science –I
Problem Solving in C

(Total Hrs of teaching -60@4hrs/wk)

Aim and objectives of Course:

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

Learning outcomes of Course:

- Upon successful completion of the course, a student will be able to:
- Understand the evolution and functionality of a Digital Computer.
- Apply logical skills to analyze a given problem
- Develop an algorithm for solving a given problem.
- Understand 'C' language constructs like Iterative statements, Array processing, Pointers.
- Apply 'C' language constructs to the algorithms to write a 'C' language program.

II Semester Computer Science-II
Data Structures Using C

(Total Hrs of teaching -60@4Hrs/wk)

Aim and objectives of Course:

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

Learning outcomes of Course:

- Upon successful completion of the course, a student will be able to: Understand available Data Structures for data storage and processing.
- Comprehend Data Structure and their real-time applications - Stack, Queue, Linked List, Trees and
- Graph Choose a suitable Data Structures for an application
- Develop ability to implement different Sorting and Search methods
- Have knowledge on Data Structures basic operations like insert, delete, search, update and traversal
- Design and develop programs using various data structures
- Implement the applications of algorithms for sorting, pattern matching etc

III Semester: Computer Science –III
Database Management Systems

(Total Hrs of teaching -60@4Hrs/wk)

Aim and objectives of Course:

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

Learning outcomes of Course:

- Upon successful completion of the course, a student will be able to:
- Gain knowledge of Database and DBMS.
- Understand the fundamental concepts of DBMS with special emphasis on relational data model
- Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database
- Model data base using ER Diagrams and design database schemas based on the model.
- Create a small database using SQL
- .Store, Retrieve data in database

IV Semester: Computer Science – IV (A)
Object Oriented Programming Using Java

(Total Hrs of teaching -60@4Hrs/wk)

Aim and objectives of Course:

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

Learning outcomes of Course:

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

IV Semester: Computer Science – IV (B)
Operating Systems
(Total Hrs of teaching -60@4Hrs/wk)

Aim and objectives of Course:

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.

Learning outcomes of Course:

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

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