Government Degree College(A)

(Affiliated to Adikavi Nannaya University, Rajamahendravaram)

Tuni, Kakinada District

Course Outcomes - Computer Science

PAPER I: PROBLEM SOLVING IN C

CO1: Understand the evolution and functionality of a Digital Computer.
CO2: Apply logical skills to analyze a given problem
CO3: Develop an algorithm for solving a given problem.
CO4: Understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.
CO5: Apply 'C' language constructs to the algorithms to write a 'C' language program.

PAPER II: Data Structures using C

CO1: 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.

PAPER III: DATABASE MANAGEMENT SYSTEMS

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.

PAPER IV: OBJECT ORIENTATED PROGRAMMING THROUGH JAVA

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.

PAPER V: OPERATING SYSTEMS

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 variousprocessmanagement 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: Understanding of modern operating systems and describe how operating systems have evolved over time.

CO9: Understand the functions of a contemporary operating system

PAPER VI: Web Interface Designing Technologies

CO1: Understand and appreciate the web architecture and services.

CO2: Gain knowledge about various components of a website.

CO3: Demonstrate skills regarding creation of a static website and an interface to dynamic website.

CO4: Learn how to install word press and gain the knowledge of installing various plugins to use in their websites

PAPERVII : Web Applications Development using PHP & MYSQL

CO1: Write simple programs in PHP.

CO2: Understand how to use regular expressions, handle exceptions, and validate data using PHP.

CO3: Apply In-Built functions and Create User defined functions in PHP programming.

CO4: Write PHP scripts to handle HTML forms.

CO5: Write programs to create dynamic and interactive web-based applications using PHP and MYSQL.

CO6: Know how to use PHP with a MySQL database and can write database driven web pages.

PAPER VIII: INTERNET OF THINGS

CO1: Appreciate the technology for IoT
CO2: Understand various concepts, terminologies and architecture of IoT systems.
CO3: Understand various applications of IoT
CO4: Learn how to use various sensors and actuators for design of IoT.
CO5: Learn how to connect various things to Internet.
CO6: Learn the skills to develop simple IOT Devices.

PAPER VII B: APPLICATION DEVELOPMENT USING PYTHON

CO1: Understand and appreciate the web architecture and services.

CO2: Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.

CO3: Demonstrate proficiency in handling Strings and File Systems.

CO4: Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.

CO5: Interpret the concepts of Object-Oriented Programming as used in Python.

CO6: Apply concepts of Python programming in various fields related to IOT, Web Services and Databases in Python.

PAPER VI C :Course 6C: DATA SCIENCE

CO1: Develop relevant programming abilities.

CO2: Demonstrate proficiency with statistical analysis of data.

CO3: Develop the ability to build and assess data-based models.

CO4: Demonstrate skill in data management

CO5: Apply data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively.

PAPER VII C: Python for Data Science

CO1: Identify the need for data science and solve basic problems using Python built-in data types and their methods.
CO2: Design an application with user-defined modules and packages using OOP concept
CO3: Employ efficient storage and data operations using NumPy arrays.
CO4: Apply powerful data manipulations using Pandas.
CO5: Do data pre-processing and visualization using Pandas

B.A./B. Com/B.Sc., SEMESTER – II: LIFE SKILL COURSE
INFORMATION & COMMUNICATION TECHNOLOGY

Course Outcomes:

CO1: Understand the literature of social networks and their properties.
CO2: Explain which network is suitable for whom.
CO3: Develop skills to use various social networking sites like twitter, flickr, etc.
CO4: Learn few GOI digital initiatives in higher education.
CO5: Apply skills to use online forums, docs, spreadsheets, etc for communication, collaboration and research.
CO6: Get acquainted with internet threats and security mechanisms.

Programme : B.Sc.(M.P.WET)

PAPER I: Fundamentals of computers, Web & Python – Programming

CO1: Understand the working of a digital computer.
CO2: Analyze a given problem and develop an algorithm to solve the problem.
CO3: Improve upon a solution to a problem.
CO4: Use the Python language constructs in the right way and Design programs in Python.
CO5: Acquire skills to implement and test Python programs.

PAPER II: Graphic Designing and Web Designing

CO1: Develop skills in digital imaging using Photoshop which is useful for webpage design.
CO2: Acquire skills in creation of logos and emblems with the help of Illustrator.
CO3: Understand basic principles of Web designing.
CO4: Setup a domain and hosting account.
CO5: Create websites with the help of Word press.

PAPER III: OBJECT ORIENTATEDPROGRAMMING THROUGH JAVA

CO1: Understand the concept and underlying principles of Object-Oriented Programming
CO2: Understand how object-oriented concepts are incorporated into the Java programming language
CO3: Develop problem-solving and programming skills using OOP concept
CO4: Understand the benefits of a well-structured program
CO5: Develop the ability to solve real-world problems through software development in high- level programming language like Java
CO6: Develop efficient Java applets and applications using OOP concept.

CO7: Become familiar with the fundamentals and acquire programming skills in the Java language.

PAPER IV: HTML, CSS & Java Script

CO1: Create a static webpage.
CO2: Acquainted with HTML basic tags, frames, lists, table, etc.
CO3: Create a webpage using cascading style sheets and HTML.
CO4: Validate web pages with the help of JavaScript.

PAPER V: PHP & MySQL

CO1: Introduction to web development with PHP
CO2: How to code a PHP application
CO3: Introduction to relational databases and MySQL
CO4: How to use PHP with a MySQL database
CO5: How to use the MVC pattern to organize your code
CO6: How to test and debug a PHP application
CO7: How to work with form data
CO8: How to code control statements
CO9: How to work with strings and numbers
CO10: How to work with dates
CO11: How to create and use arrays
CO12: How to work with cookies and sessions
CO13: How to create and use functions
CO14: How to use regular expressions, handle exceptions, and validate data