Chanda Shikshan Prasarak Mandal's

Janata Mahavidyalaya, Chandrapur

Course: B.Sc. (Computer Science)

Program Outcomes (PO)

After completion of B.Sc. with computer science students will be able to-

PSO1: Develop an ability to apply knowledge of computing, mathematics and basic science that may be relevant to the domain.
PSO2: Develop an ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
PSO3: Develop an understanding of professional, ethical, legal security, social issues and responsibilities.
PSO4: Develop an ability to communicate effectively among a range of audience.
PSO5: Recognize the need for and an ability to engage in continuous professional development.
PSO6: Develop an ability to use and apply current technical concepts and practices in the core development of solutions in the form of information technology.

Course Outcomes

Class : - B.Sc. (Computer Science)
Semester : - I
Course Name: - Paper-I (Information and Communication Technology):
Course Code: - USCST01
At the end of this course, the student will be able:

	Course Outcomes
CO1	To understand the block diagram of the computer system and the working of each unit.
CO2	To get the knowledge of all the available number systems used.
CO3	To understand the various types of input and output devices with their working.
CO4	To understand the windows operating system and its components.
CO5	To get the knowledge of networking and its various topologies.
CO6	To get the knowledge about the open source technology.

Class : - B.Sc. (Computer Science)
Semester : - I
Course Name: - Paper-II (PROGRAMMING TECHNIQUES & INTRODUCTION TO 'C'): Course Code: - USCST02
At the end of this course, the student will be able:

	Course Outcome
CO1	To Understand the Programming Concept and Design.
CO2	To get the Knowledge of Different Programming Languages.

CO3	To get the Knowledge of Design Flowchart and Write Algorithms.
CO4	To Understand the Condition and Looping in Use C Program.
CO5	To get the Knowledge of Expression and Operator in C Program
CO6	To Understand the Program Writing and Execution of C Language.

Class : - B.Sc. (Computer Science)

Semester : - I

Course Name: - Practical based on IT, Office Automation: Course Code: - USCST01

At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the structure element of MS-Word and Create and design Word page.
CO2	To get the knowledge of MS-Excel And Create Spreadsheet and Chart Etc.
CO3	To understand the various types of design and function with their working.
CO4	To understand the design the Presentation of any Work in MS-PowerPoint and its Function and Buttons.
CO5	To get the knowledge of MS-Access and Create a Database in MS-Access.
CO6	To get the Practical Based knowledge about in Office Automation.

Class : - B.Sc. (Computer Science) : Semester : - I

Course Name: - Practical Based on 'C'- PRACTICAL: Course Code: - USCST02

At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the structure of C Programming.
CO2	To get the Knowledge of write program in C Programming.
CO3	To Understand the command and Syntax of C Programming
CO4	To understand the Computation of different Operation in C Programming.
CO5	To Understand the use of C Programming.
CO6	To understand the Algorithms and Flowchart.

Class : - B.Sc. (Computer Science)

Semester : - II

Course Name: - Paper-I (Operating System & Linux): Course Code: - USCST03

At the end of this course, the student will be able:

Course Outcome #	**Course Outcome**
CO1	To understand the basics of the Operating System.
CO2	To differentiate between various types of the operating system.
CO3	To describe the basics of Linux commands and the shell of Linux.
CO4	To understand the basics of the shell scripts.

CO5	To implement the shell script.
CO6	To design various shell scripts.

Class : - B.Sc. (Computer Science): Semester : - II

Course Name: - Paper-II (STRUCTURED PROGRAMMING WITH 'C')

Course Code: - USCST04

At the end of this course, the student will be able:

	Course Outcome
CO1	To get the Knowledge of Design, implement, test, debug, and document programs in C.
CO2	To Understand the Program with pointers and arrays, perform pointer arithmetic, and use the preprocessor.
CO3	To Understand the Program low-level input and output routines in C.
CO4	To Understand how to write and use functions, how the stack is used to implement function calls, and parameter passing options.
CO5	To Understand and use the common data structures typically found in C programs — namely arrays, strings, lists, trees, and hash tables.
CO6	Create a program that measures or simulates performance and use it to analyze behavior.

Class : - B.Sc. (Computer Science) :Semester : - II

Course Name: - Practical Based on LINUX

Course Code: - USCST03

At the end of this Practical, the student will be able:

	Course Outcome
CO1	To get the basic knowledge of Linux Operating System and their Different Command.
CO2	To Understand the Use Command base in Linux OS
CO3	To understand the File Management Command and their use in Linux OS.
CO4	To understand the Directory Command and their use in Linux OS.
CO5	To get the Knowledge of Shell Script Programming.
CO6	To understand and Write the Shell Script Program and Execute in OS.

Class : - B.Sc. (Computer Science): Semester : - II
Course Name: - 'C' – Practical Course Code:
At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the C Programming Basic Command and their Function.
CO2	To get knowledge use of C Programming.
CO3	To get knowledge different command and Compile and Execute the Program
CO4	To understand the Introduction of C Programming and their Applications.
CO5	To write different types of computation based on C Programming.
CO6	To use in software design in IT Sector.

Class : - B.Sc. (Computer Science): Semester : - III
Course Name: - Paper-I (Database Management & System Analysis)
Course Code: - USCST05
At the end of this course, the student will be able:

	Course Outcome
CO1	Master the basic concepts and appreciate the applications of database systems
CO2	Be familiar with the relational database theory, and be able to write relational algebra expressions for queries.
CO3	Be familiar with basic database storage structures and access techniques: file and page organizations, indexing methods including B-tree, and hashing.
CO4	Be familiar with the basic issues of transaction processing and concurrency control.
CO5	To get the knowledge of System, its Design
CO6	To get the knowledge about the analysis of the system

Class : - B.Sc. (Computer Science): Semester : - III
Course Name: - Paper-II (Object Oriented Programming with C++)
Course Code: - USCST06
At the end of this course, the student will be able:

	Course Outcome
CO1	To Understand the Map an object-oriented program design into the class and template model of C++.
CO2	To get the Knowledge of Element of Programming and their function.
CO3	To get the Knowledge of use Classes and Object in C++.
CO4	To get the Knowledge of Use Constructors, Destructors, Inheritance, and Operator overloading and the Standard Template Library in C++.
CO5	To Understand the streaming input and output operators in C++.
CO6	To Understand the Pointers Virtual & Friend functions and file handling.

Class : - B.Sc. (Computer Science): Semester : - III
Course Name: - Practical Based on MS-ACCESS: Course Code: - USCST05
At the end of this Practical, the student will be able:

Course Outcome #	**Course Outcome**
CO1	To understand the MS-Access Component and Different Commands.
CO2	To get knowledge of Create Database and Table in MS-Access.
CO3	To get knowledge of Using Query in Database in MS-Access.
CO4	To understand Design Report and Form in MS-Access.
CO5	To create the Report and database.
CO6	To design and Create various table in MS-Access.

Class : - B.Sc. (Computer Science): Semester : - III
Course Name: - Practical on Object Oriented Programming with C++
Course Code: - USCST06
At the end of this Practical, the student will be able:

Course Outcome #	**Course Outcome**
CO1	To understand the Object Oriented and Object Based Program in C++ .

CO2	To get knowledge Create the Different Application in C++.
CO3	To get knowledge of Command and Syntax in C++ Programming.
CO4	To understand C++ Programming and its importance by using various Ways.
CO5	To create the different Program using C++.
CO6	To Understand the file handling command in C++ Etc.

Class : - B.Sc. (Computer Science): Semester : - IV
Course Name: - Paper-I (ALGORITHM & DATA STRUCTURES)
Course Code: - USCST07
At the end of this course, the student will be able:

	Course Outcome
CO1	To Understand the Introduction of Data Structure and Their Algorithms.
CO2	To get the Knowledge of Sorting and Searching Method.
CO3	To Understand the Use of Stack and Queues.
CO4	To get the Knowledge of Recursion Method and their Examples.
CO5	To Understand the Linked List and their Uses.
CO6	To get the Knowledge of Tree and Graph and Their Uses.

Class : - B.Sc. (Computer Science)
Semester : - IV
Course Name: - Paper-II (VISUALBASIC & INTRODUCTION To .NET) Course Code: - USCST08
At the end of this course, the student will be able:

	Course Outcome
CO1	To Understand how to perform operations and store results.
CO2	To Understand the concept of data-driven program execution flow control in Visual Basic programming.
CO3	The student will apply and synthesize knowledge of user interface design.
CO4	The student will demonstrate understanding and application of a modern Integrated Development Environment (IDE).
CO5	The student will demonstrate database connectivity useful for Projects
CO6	The student get idea about the basic concept of .Net

Class : - B.Sc. (Computer Science): Semester : - IV
Course Name: - Practical Based on Data Structure
Course Code: - USCST07
At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the Data Structure and their Different algorithms.
CO2	To get knowledge of algorithms and their use in C++ Programming.
CO3	To get knowledge different function and their implementation in C++ Programming.
CO4	To understand the tree and graph Operation and Implement in C++ Programming.
CO5	To Write Different algorithms and solve numerical Operation of Data Structure and use in C++ Programming.
CO6	To Understand the fundamental Operation of data Structure and use in C++ Programming.

Class : - B.Sc. (Computer Science):
Semester : - IV
Course Name: - Practical Based on Visual Basic & Introduction to .NET Course Code: - USCST08
At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the Visual Basic Structure and their Commands.
CO2	To get knowledge of Design Form and coding of VB.
CO3	To get knowledge of Command, Syntax in Visual Basic and .NET.
CO4	To get the Knowledge for design Software in Using Visual Basic.
CO5	To understand the Different types of Software Designing in .NET.
CO6	To Understand the Multiple form designing and their Execution.

Class : - B.Sc. (Computer Science): Semester : - V
Course Name: - System Analysis and Project Management: Course Code: - Paper-I

At the end of this course, the student will be able:

	Course Outcome
CO1	To get the basic knowledge of System, their types and working.
CO2	To get the better idea about data and information, Information Life Cycle.
CO3	To understand the Software Development Life Cycle.
CO4	To understand various tools for structure analysis.
CO5	To get the idea for implementation of system design and usage of Documentation.
CO6	To understand the Project management, Quality Assurance and various quality Standards.

Class : - B.Sc. (Computer Science): Semester : - V
Course Name: - DATABASE PROGRAMMING WITH ORACLE Course Code: - Paper-II

At the end of this course, the student will be able:

	Course Outcome
CO1	Enhance the knowledge and understanding of Database analysis and design.
CO2	Get the Knowledge about the SQL.
CO3	Enhance the knowledge of the processes of Database Development and Administration using SQL and PL/SQL.
CO4	Enhance Programming and Software Engineering skills and techniques using SQL and PL/SQL.
CO5	Use the Relational model and how it is supported by SQL and PL/SQL.
CO6	Use the PL/SQL code constructs of IF-THEN-ELSE and LOOP types as well as syntax and command functions.

Class : - B.Sc. (Computer Science)
Semester : - V
Course Name: - Practical Based on Oracle
Course Code: - Paper-II

At the end of this Practical, the student will be able:

	Course Outcome
CO1	To understand the Database Management by using Oracle.
CO2	To get knowledge of SQL And PL/SQL Command in Oracle.
CO3	To get knowledge of Using different Query in Database by using Oracle.
CO4	To understand Create the Table and manipulate the Record and View.
CO5	To Understand the Structure of PL/SQL Programming and their use.
CO6	To Create various Database and Connecting the front End Language.

Class : - B.Sc. (Computer Science)
Semester : - VI
Course Name: - E- Commerce and HTML **Course Code: - Paper-I**

At the end of this course, the student will be able:

	Course Outcome
CO1	To understand the basic difference between Commerce and E- commerce
CO2	To get knowledge of EDI and the trade cycle.
CO3	To get knowledge of Internet and its various services.
CO4	To understand HTML and its importance by using various tags.
CO5	To create the WebPages using HTML
CO6	To design various web forms using HTML.

Class : - B.Sc. (Computer Science)
Semester : - VI
Course Name: - Data Communication with Cloud Computing Basics
Course Code: - Paper-I

At the end of this course, the student will be able:

	Course Outcome
CO1	Describe the components of a data communications system.
CO2	Explain the role of line codes in a data communications network.
CO3	Describe the various types of signals and their features.
CO4	Describe the features and functions of multiplexing and modulation.
CO5	Basics of cloud computing
CO6	Different Cloud Computing services

Class : - B.Sc. (Computer Science)

Semester : - VI

Course Name: - Practical Based On E- Commerce and HTML.

Course Code: - Paper-II

At the end of this Practical, the student will be able to:

	Course Outcome
CO1	To understand the Structure of HTML and their different Tags.
CO2	To get knowledge Creating a Webpage by Using HTML.
CO3	To get knowledge of Hyperlink of Website in HTML.
CO4	To understand HTML and its importance by using various tags.
CO5	To understand the Different Application of HTML.