CHOICE BASED CREDIT SYSTEM

B.Sc. Program with Computer Science

Course Outcomes of the course "Problem Solving with Computer"

After completion of this course the students will be able -

- CO1 Recognize the basic Basic Computer Organization like CPU, ALU, memory hierarchy, registers,I/O devices etc.
- CO2 Recognize the basic data types, control statements and Loop in Python Program.
- CO3. Summarize the concept of Objects and Classes, Inheritance, Regular

Expressions, Event Driven Programming in Python Program.

- CO4. To create efficient program using functions to implement reusability.
- CO5. Apply the structures in making application software using GUI Programming.

Course Outcomes of the course "DBMS"

After completion of this course the students will be able -

- CO1 . Identify the basic concepts and various data model used in database design ER modelling concepts and architecture use and design queries using SQL.
- CO2 . Apply relational database theory and be able to describe relational algebra expression, tuple and domain relation expression fro queries.
- CO3 . Recognize and identify the use of normalization and functional dependency, indexing and hashing technique used in database design.
- CO4 . Recognize/ identify the purpose of query processing and optimization and also demonstrate the basic of query evaluation.
- CO5 . Apply and relate the concept of transaction, concurrency control and recovery in database.

Course Outcomes of the course "OS"

After completion of this course the students will be able -

- CO1 . Understand the basics of operating systems like kernel, shell, types and views of operating systems
- CO2. Describe the various CPU scheduling algorithms and remove deadlocks.
- CO3. Explain various memory management techniques and concept of thrashing
- CO4. Recognize file system interface, security mechanisms and protection.
- CO5 . Use disk management and disk scheduling algorithms for better utilization of external memory.

Course Outcomes of the course "Computer System Architecture"

After completion of this course the students will be able -

- CO1. Identify the basic concepts of gates.
- CO2. Identify the concepts of different types of combinational circuit.
- CO3 .Introduction to computers and CPUs, as well as concepts of stored programmes.
- CO4. Instruction, Instruction Cycle, Interrupt, and Interrupt Cycle are all covered in this course.
- CO5 . familiarity with Addressing Modes, I/O Bus Concept, and DMA Controller.

Course Outcomes of the course "Programming in JAVA"

After completion of this course the students will be able -

- CO1. Learn basic concepts Java Programming Language
- CO2. Use the syntax and semantics of java programming language and basic concepts of OOP.
- CO3 . Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and Method Overloading, Method Overriding, Nested and Inner classes.
- CO4 . Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes.

CO5 . Create wide range of Applications and Applets using Java and ability to work with I/O Streams

Course Outcomes of the course "Discrete Structures"

After completion of this course the students will be able -

- CO1. To develop understanding of Logic Sets and Functions.
- CO2. To develop improved collaborative skills.
- CO3 . To communicate the solutions of technical problems to other professionals.
- CO4 . Able to use logical notations to define and reason about fundamental mathematical concepts such as sets relations and functions
- CO5. Able to formulate problems and solve recurrence relations

Course Outcomes of the course "Software Engg"

After completion of this course the students will be able -

- CO1 . Apply the concepts of life cycle models to choose the appropriate model.
- CO2. Analyse the requirements and design the software.
- CO3. Construct or implement the software based on the industry standards
- CO4. Design and develop test cases
- CO5. Work with version control and work on configuration and release management plans

Course Outcomes of the course "Computer Networks"

After completion of this course the students will be able –

- CO1 . Describe various components and categories of data communications, types of connections, topologies, protocols and standards, various transmission media and modems.
- CO2 . Detect and correct the errors using various algorithmic techniques, be aware of the various Ethernet standards and bridges.
- CO3 . Explain various switching techniques used and implement the various routing and router protocols.
- CO4. Illustrate multiplexing and demultiplexing, UDP, TCP protocols and Congestion Control

		•
mec	han	isms.

CO5 . Illustrate Network Applications.

Course Outcomes of the course "Programming in Python" (SEC)

- CO1. Event Driven Programming in Python Program.
- CO2. To create efficient program using functions to implement reusability.
- CO3. Apply the structures in making application software using GUI Programming.
- CO4 . Acquire the skills to write Python database apps.
- CO5 . learn Python's Object-Oriented Skills

Course Outcomes of the course "R Programming" (SEC)

After competing this course, you will be able to:

- CO1. Explain critical R programming concepts
- CO2 . Demonstrate how to install and configure RStudio
- CO3 . Apply OOP concepts in R programming
- CO4. Explain the use of data structure and loop functions
- CO5. Analyse data and generate reports based on the data