DEPARTMENT OF COMPUTER SCIENCE
PROGRAMME: B.SC.

Statement of Course Outcomes

B.Sc. Part I Semester I Paper-I :- Programming in C

By the end of this Programme, the students will be able to:

- Understand programming structures like Sequence, Selection, Iteration and Modular.
- Understand development tools such as algorithm, flowchart and pseudo code for any problem to solve them programmatically.
- Understand basic concepts of programming in C such as character set, Operators, Functions etc.
- Understand arrays, strings, functions, structures, unions and pointers.
- Understand the file handling, sequential access and random access programmatically.

Programme: B.Sc. Part I Semester I Paper-II :- Fundamentals of Information Technology

By the end of this Programme, the students will be able to:

- Understand the meaning and basic components of a Digital computer system
- Understand the role of CPU, BUS, Number System, and Language Evaluation
- Understand the concept of Compilers, Interpreters and Assembler
- Understand the concepts and need of primary and secondary memory, different storage devices
- Explain input devices and output devices.
- Explain Network concepts, LAN, WAN Man, Network protocols etc.

Programme: B.Sc. Part I Semester II Paper-I :- Object Oriented Programming using 'CPP'

By the end of this Programme, the students will be able to:

- Understand key structured programming, constructs declaration sequence, selection, repetition evaluating expression.
- Understand C++ functions and the concepts related to good modular designs.
- Understand pointers and reference parameters; understand the creation of class and objects.
- Handle files programmatically creating dynamic objects.
- Understand inheritance virtual functions, need and pure virtual functions.
- Understand mechanism of online function, constructors, destructors, operator overloading and exception handling.

Programme: B.Sc. Part I Semester II Paper-II :- System Analysis and Design

By the end of this Programme, the students will be able to:

- Carry Feasibility Study of system, Gather data to analyze and specify requirements of a system
- Design system components and environment
- Develop data flow diagram and decision tables to design system
- Understand the concept of Implementation, Testing and Conversion of system
- Work as an effective tem member on assigned projects.
- Understand the concept of Software Reliability and Quality Management.

Programme: B.Sc. Part II Semester III Paper-I :- Data Structures

By the end of this Programme, the students will be able to:

- Determine appropriate data structure as applied to specified problem definition.
- Understand the concept of Linked List, Double linked List and their representation
- Explain the different mechanism involved in memory Mgt.
- Understand the concept of avoidance, detection and prevention of Deadlock.
- Explain Trees in Memory, Definition and Representation of Graphs in Memory

Programme: B.Sc. Part II Semester III Paper-II :- Operating Systems

By the end of this Programme, the students will be able to:

- Understand the basic of Structure of Operating System, Characteristics of Modern OS
- Understand the anatomy of Process Management, CPU Scheduling Algorithm
- Understand the concept of deterministic Modelling, Dead Lock Prevention, Dead Lock Detection, Recovery from Deadlock
- Explain paging, segmentation, Segmentation with paging. Protection
- Understand file management, Buffering.

Programme: B.Sc. Part II Semester IV Paper-I :- Java Programming

By the end of this Programme, the students will be able to:

- Understand model of Java Programming language such as Operators, tokens etc.
- Creating a class & subclass, Understand Data members, Invoke a method, passing arguments to a method, calling method.
- Explain Method overloading, Constructor overloading. Java class library
- Understand Decision making & loops, Creating an array, String array,
- Explain the concept of Inheritance and Interfaces
- Evaluate user requirement for software functioning.
- Solve given problems using Java programming.
- Create GUJ applications

Programme: B.Sc. Part II Semester IV Paper-II :- Linux Operating System

By the end of this Programme, the students will be able to:

- Understand the basic set of commands and utilities in Linux, concept of shell
- Understand the anatomy of Linux operating system, editor and procedure of printing files
- Sharing Files with other Users
- Perform backup and to create compress file and decompress them.
- Perform operation on process.
- Understand KDE and GNOME desktop environment.

Programme: B.Sc. Part III Semester V Paper-I :- Visual Basic Programming

By the end of this Programme, the students will be able to:

- Write, compile and execute applications using various controls like text box, command button.
- Write programs using Arrays and functions
- Write, compile and execute applications using database connectivity like ADODC.
- Create database using MS-Access and visual Data managers

- Write, compile and execute Menu driven application.
- Explain Data Environment and Data Reports.

Programme: B.Sc. Part III Semester V Paper-II :- Data Base Management System

By the end of this Programme, the students will be able to:

- Understand basic concepts of DBMS, its objective
- Role of Database Administrator, Database Users, different Data models and network models
- Understand concept of ER model.
- Explain Relational Model, Structure and Extended Relational model
- 5 Understand Functional Dependency and Perform normalization of database.

Programme: B.Sc. Part III Semester VI Paper-I :- Compiler Construction

By the end of this Programme, the students will be able to:

- Understand Compilers and translators and their need.
- Explain Intermediate code Generation.
- 3 Define programming languages, ,High Level programming languages
- Understand the lexical and syntactic structure of a language, the role of the lexical analyser
- Understand Parsers, Shift-reduce parsing and DAG representation of basic blocks

Programme: B.Sc. Part III Semester VI Paper-I :- SQL and PL/SQ

By the end of this Programme, the students will be able to:

- Understand CODD'S Rules, Oracle Database Objects, data types, operators
- Create tables, derive table from existing table, altering, dropping of Tables.
- Check Integrity Constraints and Adding and Dropping Constraints
- Understand types of Views, Create Views, Drop Views, Insert, Update and Delete 5Data using Views,.
- 5Understand basic concepts of PL/SQL Programming
- Create cursors, triggers and Exception Handling