

## **DEPARTMENT OF INFORMATION TECHNOLOGY**

### **Course Outcome of B.Sc. Information Technology**

1. Students are able to use their knowledge to develop different windows based applications.
2. They can start their own business in web development and software development.
3. Students can create database and applications for their clients.
4. Students can also pursue the career of computer operators.
5. Students will able to learn the latest trends in various subjects of computers & information technology.
6. Design and develop applications to analyze and solve all computer science related problems.
7. Understanding application of Different software needed for rural areas development.
8. Effective Computer Skills and development personality.

## **Program Specific Outcomes(PSOs)**

1. Student will be able Understand Basic concept, and Programming language like procedure oriented language, Object oriented programming.
2. Student will be able Design applications for any desired needs with appropriate considerations for any specific need on societal and industrial aspects.
3. Students become eligible to pursue MCA and M.Sc. in Information Technology.
4. Student will have knowledge of Different Hardware and software.
5. Understanding application of different software. Needed for area development like Govt. sector, online trading, and institute.
6. It will equip the students with skills required for designing, developing applications in Information Technology.
7. Effective skills to create and analyze algorithms and program for solving problem of real life like searching, sorting etc.

# **Course Out Come**

## **B.Sc.-I**

### **Paper-I: FUNDAMENTAL OF IT, COMPUTER AND PC SOFTWARE**

#### **On studying this paper, student will be able to:**

1. Acquire knowledge Concept of IT, Information System, Application of IT in various fields.
2. Acquire knowledge of Computer Network, various types of Computer Network, Modes Communication in network, and various social networking sites popular in present time.
3. Acquire knowledge of word processing application software MS Word and learn to use this software to create and format various types of document.
4. Acquire knowledge of Spreadsheet application software MS Excess and learn to use this software to create and format various types of document having record type data containing numerical and text type data.
5. Acquire knowledge of Presentation software MS Power Point and learn to use this software to create effective presentation.

### **Paper- II: Programming in C Language**

#### **On studying this paper, student will learn and know:**

1. Fundamentals of C Programming Language.
2. Control structure and function in C Programming Language.
3. Derived data type Array, string, structure, union and enum.
4. Pointer and Dynamic memory allocation.
5. File handling, command line argument

### **Paper – III: Practical Based on Paper I and Paper II**

#### **On studying this paper, student will be able to:**

1. Learn Basic technique of designing and developing Program.
2. Acquire knowledge of Basic Application software like M.S Word, M.S. Access, M.S. Power Point etc.
3. Learn the base of computer programming language with C language.
4. Learn Writing, saving, compiling and running C language Program.
5. Learn Solving problem like storing, searching, sorting, listing elements of array.
6. Learn Concept of solving problem in modular ways with the help of function.
7. Learn writing program for Storing record type data in computer program.
8. Learn to write program with Dynamic memory allocation concept.
9. Learn to write program for Creating, reading, writing and updating files with C program.

## **B.Sc. –II**

### **Paper-I: DIGITAL CIRCUITS & COMPUTER H/W**

#### **On studying this paper, student will be able to:**

1. Acquire knowledge and learn about Number system, its types, various ways of representation of binary data and various arithmetic operations can be performed on these numbers.
2. Acquire detail knowledge about Boolean algebra.
3. Acquire knowledge about combinational and multivibrator circuits.
4. Acquire knowledge about Central Processing Unit, its various component and Input/ Output Organization.

### **Paper- II: Computer Software**

#### **On studying this paper, student will learn and know:**

1. Concept and features of Object Oriented Programming.
2. Implementation of Object Oriented Programming with C++.
3. Modular approach of solving a problem of real life with the help of class and object.
4. Creating class and object, to use reusability of code through concept inheritance and applying concept of polymorphism to solve problems.
5. Implementation of dynamic memory allocation with new features of C++.
6. File handling with stream and Object oriented approach.

### **Paper III- Practical Paper**

#### **Student will learn following while studding this paper:-**

1. Implementation of Object Oriented Programming with C++.
2. Modular approach of solving a problem of real life.
3. Creating Program having class and object, reusability of code through concept inheritance, concept of polymorphism.
4. Dynamically allocation and de-allocation of memory for various data element with help of new and delete operator.
5. Creating, reading, writing and updating files with stream and Object oriented approach.

## **B.Sc. –III**

### **Paper-I: Amplifier and Oscillators**

**On studying this paper, student will be able to:**

1. Acquire detail knowledge of Oscillators and Feedback Amplifiers.
2. Acquire detail knowledge about Amplifiers and classifications of Amplifiers.
3. Understand the concept of operations of power amplifiers and power control devices.
4. Understand the INTEL 8085 microprocessor and components.
5. Familiar with the Machine and Assembly language programming.

### **Paper- II: Fundamental Data Structure**

**On studying this paper, student will learn and know:**

1. Understand the concept of Data structure, algorithms and scope of data structure.
2. Learn the concept of Stack and Queue and also learn how it implements.
3. Acquire the knowledge about Linked List and its operations.
4. Understand the concept of Tree, basic terminology and tree representations.
5. Understand searching and sorting concepts and related algorithms.

### **Paper – III: Practical Based on Paper II**

**On studying this paper, student will learn and know:**

1. C++ program that implements Merge sort algorithm for sorting a list of integers in ascending order.
2. C++ program that implements Quick sort algorithm to arrange a list of elements in ascending order.
3. Traverse the above Binary search tree recursively in preorder, in order and post order.
4. Create a doubly linked list of elements.
5. Display the contents of the Array after deletion.
6. C++ Program for Infix to Postfix Conversion using Stack.