

# **DEPARTMENT OF COMPUTER SCIENCE**

## **Program Outcome of B.Sc. (COMPUTER SCIENCE)**

***After completing graduation in computer Science, a student will be able to develop:***

1. Students are able to use their knowledge to develop different web and windows based applications.
2. They can start their own business in web development and software development.
3. Students can create database, websites 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)**

Name of Program: B.Sc. ( Computer Science)

1. Understand Basic concept, and Programming language like procedure oriented language, Object oriented programming, event driven programming, database Management System.
2. Student becomes 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 Computer Science.
4. Student has better understanding of basic Hardware and software.
5. Understanding application of different software. Needed for area development like Govt. sector, online trading, and institute.
6. This program will equip the students with skills required for designing, developing various applications software.

## **Course Outcome B.Sc. (Computer Science)**

**B.Sc. – I**

**Subject: Computer Science**

**Paper-I: Computer Fundamental**

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

1. Acquire knowledge about Basic, definition, history, evolution, major component and types of Computer.
2. Acquire detail knowledge about Central Processing Unit.
3. Acquire knowledge about definition and various type memory and I/O devices of Computer.
4. Acquire knowledge about computer programming language, program, software, types of software and software development technique.

## **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**

### **Subject: Computer Science**

#### **Paper-I: Computer Hardware**

On studying this paper, student will be able to:

1. Acquire knowledge about Basic, definition, history, evolution, major component and types of Computer.
2. Acquire detail knowledge about Central Processing Unit.
3. Acquire knowledge about definition and various type memory and I/O devices of Computer.

4. Acquire knowledge about computer programming language, program, software, types of software and software development technique.

### Paper- II: Computer Software

On studying this paper, student will learn and know:

1. Basic of HTML, Web standard, structures of web page, structures of HTML document, creating web page, basic elements of HTML, types of tags in html, various tags in HTML.
2. Inserting images in web page, linking a web page to another web page, and linking a particular place of web page.
3. With the help of Frame dividing a window and rendering multiple pages in same window.
4. Developing a complete web application.
5. Concept and features of Object Oriented Programming.
6. Implementation of Object Oriented Programming with C++.
7. Modular approach of solving a problem of real life.
8. Creating class and object, reusability of code through concept inheritance, concept of polymorphism.
9. File handling with stream and Object oriented approach.

### Paper III- Practical Paper

Student will learn following while studding this paper:-

1. Creating web page, viewing source of a web page, creating ordered list and unordered list, inserting table, paragraphs, block quote etc in web page, setting font and color of text of web page, setting background of web page.
2. Creating and student login, student registration form and other types of form in HTML web page.
3. Dividing browser window and rendering multiple web pages in same window.
4. Inserting images in web page, linking a web page to another web page, and linking a particular place of web page.
10. Developing a complete web application.
11. Implementation of Object Oriented Programming with C++.
12. Modular approach of solving a problem of real life.
13. Creating Program having class and object, reusability of code through concept inheritance, concept of polymorphism.
14. Creating, reading, writing and updating files with stream and Object oriented approach.

## **B.Sc. –III**

### **Subject: Computer Science**

#### **Paper-I: Computer Hardware**

##### **On studying this Paper student will have:-**

1. Learned and acquired knowledge of overall organization of microprocessor and operating system.
2. Acquired knowledge of Interaction of common devices used with computer and operating system with special reference to Disk operating System and windows operating system.
3. Learned and acquired knowledge of Working or hardware component, micro processor and various chips used in micro computer by operating System.
4. Learned and acquired knowledge of Operating System Architecture with IBM PC and clones with important part of hardware.

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

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

1. Learn and Acquire knowledge of Concept of Database Management System and data model.
2. Learn Designing of data base and reducing the design into table.
3. Acquire knowledge of Relational Database Management System and relational data base design.
4. Learn to work with RDBMS software oracle.
5. Learn and Acquire knowledge of GUI Programming and database connectivity with visual basic.

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

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

1. Creating Database, database table, defining various constraints on data base table, creating view on database table in oracle.
2. Inserting, updating, deleting records of data base table. Updating records on views.
3. Displaying, searching, and filtering records of one or more table by applying various clauses available in oracle.
4. Grouping records of one or more table, applying filters on grouped records and displaying records on screen.
5. Applying security in database and database table by creating various roles and users and granting and revoking various privileges and roles to users and roles.
6. Developing small and basic event driven and graphical user interface based desktop application and learning various tools and control available in visual basic.
7. Developing desktop application with backend database connectivity.

