

# **COURSE OUTCOME**

**JUNE-2012**

## **CS1B01-PROBLEM SOLVING AND C PROGRAMMING**

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems
- 

## **CS1B02-LAB I: C PROGRAMMING LAB**

- To make the students learn programming environments.
- To practice programming.
- To make the students equipped to solve mathematical or scientific problems using C.

## **CS2B03- DATA AND FILE STRUCTURE**

- To introduce the concept of data structures.
- To make the students aware of various data structures.
- To equip with students implementing fundamental data structures.

## **CS2B04-LAB II: DATA STRUCTURES THROUGH C LANGUAGE**

- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

## **A06-HISTORY AND PHILOSOPHY OF SCIENCE**

- To introduce origin of science and philosophy in ancient times.
- To learn about Science and philosophy in the middle age.

## **A12-GENERAL INFORMATICS**

- To learn about the basic concepts of computer fundamentals
- To learn about knowledge skills for higher education
- To learn about social informatics
- To learn about open source software.

## **CS3B05- FUNDAMENTALS OF OPERATING SYSTEMS.**

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems.

## **CS3B06-LAB III: WINDOWS, LINUX & SHELL PROGRAMMING**

- To have practice in windows OS.
- To have practice in Linux OS and shell.
- To practice various OS Commands.
- To learn shell programming under Linux/Unix.

## **A13-BASIC NUMERICAL SKILLS**

- To learn about the basic concepts of problem solving.
- To learn about various statistical Techniques.

## **A14 – ENTREPRENEURSHIP DEVELOPMENT**

- To identify and develop the entrepreneurial talents of students
- To generate innovative business idea in emerging industrial scenario.

## **CS4B07- FUNDAMENTALS OF DATABASE MANAGEMENT SYSTEMS**

- To understand need and working of DBMS.
- To understand various architectures of DBMS.
- To learn relational model and SQL.
- To learn relational database design.

## **CS4B08-DBMS LAB**

- To learn practical database design.
- To create & manipulate various database objects.
- To practice administration of DBMS through PostgreSQL.
- To practice SQL Commands.

## **CSS5B09-JAVA PROGRAMMING**

- To have a review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **CS5B10-WEB PROGRAMMING**

- To learn client side and server side scripting.
- To learn PHP Programming.
- To learn how to develop dynamic websites.
- To learn how to interact with databases through internet.

## **CS5B11-PRINCIPLES OF SOFTWARE ENGINEERING**

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.

## **CS5B12-LAB V: JAVA PROGRAMMING**

- To practice java programming.

## **CS5B13-LAB VI: WEB PROGRAMMING**

- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through internet.

## **Open Courses (XXX5DXX)**

### **CS5D03| Introduction to Problem solving and C programming**

- To Introduce fundamental principle of problem solving aspects
- To learn the concept of programming
- To learn C language

### **CS5B14-PROJECT WORK**

- To provide practical knowledge on software development process

### **CS6B15-COMPUTER ORGANIZATION AND ARCHITECTURE**

- To learn basic Architecture of a Computer
- To learn basic Computer Organization.

### **CS6B16-MICROPROCESSOR & APPLICATIONS**

- To understand internals of microprocessor.
- To learn architecture of 8086  $\mu$ P.
- To learn instruction set of 8086  $\mu$ P.
- To learn how to program a  $\mu$ P.

### **CS6B17-COMPUTER NETWORKS**

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

## **CS6B17-LAB: MICROPROCESSOR PROGRAMMING USING TASM/MASAM/NASAM**

- To learn microprocessor programming.

## **CS6B18-LAB: NETWORK ADMINISTRATION**

- To learn network administration.

## **CS6E01-ELECTIVE COURSE –VISUAL PROGRAMMING**

- To get a general understanding on .Net Frame Work
- To get a general understanding on ADO.Net

## **CS6B20-PROJECT WORK**

- To provide practical knowledge on software development process

**JUNE-2014**

## **BCS1B01 - Problem Solving Using C**

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

## **BCS2B02 –OOP CONCEPTS AND DATASTRUCTURES USING C++**

- To learn basic concepts of OOPS.
- To learn Object Oriented Programming through C++.
- To introduce the concept of data structures.
- To make the students aware of various data structures.
- To equip the students, implement fundamental data structures.

## **CSC2B03- PROGRAMMING LABORATORY I: PROGRAMMING IN C AND DATA STRUCTURE USING C++**

- To make the students learn programming environments.
- To practice procedural/OO programming concepts.
- To make the students equipped to solve mathematical or scientific problems using C/C++.
- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

## **A11-NUMERICAL SKILLS**

- To learn about the basic concepts of problem solving
- To learn about various statistical Techniques.

## **A12-GENERAL INFORMATICS**

- To learn about the basic concepts of computer fundamentals
- To learn about knowledge skills for higher education
- To learn about social informatics
- To learn about open source software.

## **BCS3B04-FUNDAMENTALS OF DIGITAL ELECTRONICS**

- To learn number systems and Boolean algebra.
- To learn combinational and sequential circuits
- To learn A/D and D/A converters

## **BCS3B05- VISUAL PROGRAMMING USING VB.NET**

- To get a general understanding on .Net Frame Work
- To get a general understanding on ADO.Net

## **A13 – Entrepreneurship**

- To identify and develop the entrepreneurial talents of students  
To generate innovative business idea in emerging industrial scenario

## **A14 – Basics of Audio & Video Media**

- To learn the basics of audio and video recording
- To learn how the human anatomy reacts to sound, music and noise.
- To distinguish between acoustic and sound

## **BCS4B06-FUNDAMENTALS OF DATABASE MANAGEMENT SYSTEM AND RDBMS**

- To learn the basic principles of database and database design.
- To learn the basics of RDBMS.
- To learn the concepts of database manipulation SQL.
- To study PL/SQL language.

## **BCS4B07- PROGRAMMING LABORATORY I: VB.NET & RDBMS**

- To practice Visual Programming using VB.NET.
- To learn practical database design.
- To create & manipulate various database objects.
- To practice SQL Commands.

## **BCS5B08-COMPUTER ORGANIZATION AND ARCHITECTURE**

- To learn basic Architecture of a Computer
- To learn basic Computer Organization.

## **BCS5B09-JAVA PROGRAMMING**

- To have a review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B10-WEB PROGRAMMING USING PHP**

- To learn client side and server side scripting.
- To learn PHP Programming.
- To learn how to develop dynamic websites.
- To learn how to interact with databases through internet.

## **BCS5B11-PRICIPLES OF SOFTWARE ENGINEERING**

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.

### **Open Courses (XXX5DXX)**

## **BCS5D01| Introduction to Computers & Office Automation**

- To learn Office Automation.

## **BCS6B12- ANDROID PROGRAMMING**

- To have a review on concept of Android programming.
- To learn Android Programming Environments.
- To practice programming in Android.
- To learn GUI Application development in Android platform with XML

## **BCS6B13- FUNDAMENTALS OF OPERATING SYSTEM**

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems.

## **BCS6B14- COMPUTER NETWORKS**

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

## **BCS6B15- PROGRAMMING LABORATORY III: JAVA & PHP PROGRAMMING**

- To practice Java programming.
- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through PHP.

## **BCS6B16- PROGRAMMING LABORATORY IV: ANDROID & LINUX SHELL PROGRAMMING**

- To practice Android programming.
- To practice user interface applications.
- To develop mobile application.
- To practice shell programming

## **BCS6B17a-Elective Course: Computer Graphics**

- To learn basics of computer graphics

## **BCS6B18- PROJECT**

- To provide practical knowledge on software development process.

## JUNE-2017

### **BCS1B01 – COMPUTER FUNDAMENTALS & HTML**

- To equip the students with fundamentals of Computer
- To learn the basics of Computer organization
- To equip the students to write algorithm and draw flow chart for solving simple problems
- To learn the basics of Internet and webpage design

### **BCS2B02 – Problem Solving Using C**

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

### **BCS2B03 - Programming Laboratory I: Lab Exam of 1st & 2nd Semester HTML & Programming in C**

- To make the students learn web designing
- To make the students learn programming environments.
- To practice procedural programming concepts.
- To make the students equipped to solve mathematical or scientific problems using C

### **BCS3B04 – Data Structures Using C**

- To introduce the concept of data structures
- To make the students aware of various data structures
- To equip the students, implement fundamental data structure

### **A11-NUMERICAL SKILLS**

- To learn about the basic concepts of problem solving
- To learn about various statistical Techniques.

### **A13 – Entrepreneurship**

- To identify and develop the entrepreneurial talents of students  
To generate innovative business idea in emerging industrial scenario

## **A14 – Basics of Audio & Video Media**

- To learn the basics of audio and video recording
- To learn how the human anatomy reacts to sound, music and noise.
- To distinguish between acoustic and sound

## **BCS4B05 – Database Management System and RDBMS**

- To learn the basic principles of database and database design
- To learn the basics of RDBMS
- To learn the concepts of database manipulation SQL
- To study PL/SQL language

## **BCS4B06- Programming Laboratory II: Lab Exam of 3rd & 4th Semester Data Structures & RDBMS**

- To make the students equipped to solve mathematical or scientific problems using C
- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

## **BCS5B07-Computer Organization & Architecture**

- To learn logic gates, combinational circuits and sequential circuits
- To learn basics of computer organization and architecture

## **BCS5B08-Java Programming**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B09-Web Programming using PHP**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B10-Principles of Software Engineering**

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.

## **Open Courses (XXX5DXX)**

### **BCS5D01| Introduction to Computers & Office Automation**

- To learn Office Automation.

### **BCS6B11-Android Programming**

- To have a review on concept of Android programming.
- To learn Android Programming Environments.
- To practice programming in Android.
- To learn GUI Application development in Android platform with XML

### **BCS5B12-Operating Systems**

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems

### **BCS5B13-Computer Networks**

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

### **BCS5B14- Programming Laboratory III: Lab Exam of V<sup>th</sup> Semester Java & PHP Programming**

- To practice Java programming.
- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through PHP.

## **BCS5B15-Programming Laboratory IV: Lab Exam of Android & Linux shell Programming**

- To practice Android programming.
- To practice user interface applications.
- To develop mobile application.
- To practice shell programming

## **BCS5B16D-Elective Course: Computer Graphics**

- To learn basics of computer graphics

## **BCS5B17-Project Work**

- To provide practical knowledge on software development process

## **JUNE-2018**

### **BCS1B01 – COMPUTER FUNDAMENTALS & HTML**

- To equip the students with fundamentals of Computer
- To learn the basics of Computer organization
- To equip the students to write algorithm and draw flow chart for solving simple problems
- To learn the basics of Internet and webpage design

### **BCS2B02 – Problem Solving Using C**

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

### **BCS2B03 - Programming Laboratory I: Lab Exam of 1st & 2nd Semester HTML & Programming in C**

- To make the students learn web designing
- To make the students learn programming environments.
- To practice procedural programming concepts.
- To make the students equipped to solve mathematical or scientific problems using C

### **BCS3B04 – Data Structures Using C**

- To introduce the concept of data structures
- To make the students aware of various data structures
- To equip the students, implement fundamental data structure

### **A11-NUMERICAL SKILLS**

- To learn about the basic concepts of problem solving
- To learn about various statistical Techniques.

### **A13 – Entrepreneurship**

- To identify and develop the entrepreneurial talents of students
- To generate innovative business idea in emerging industrial scenario

## **A14 – Basics of Audio & Video Media**

- To learn the basics of audio and video recording
- To learn how the human anatomy reacts to sound, music and noise.
- To distinguish between acoustic and sound

## **BCS4B05 – Database Management System and RDBMS**

- To learn the basic principles of database and database design
- To learn the basics of RDBMS
- To learn the concepts of database manipulation SQL
- To study PL/SQL language

## **BCS4B06- Programming Laboratory II: Lab Exam of 3rd & 4th Semester Data Structures & RDBMS**

- To make the students equipped to solve mathematical or scientific problems using C
- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

## **BCS5B07-Computer Organization & Architecture**

- To learn logic gates, combinational circuits and sequential circuits
- To learn basics of computer organization and architecture

## **BCS5B08-Java Programming**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B09-Web Programming using PHP**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B10-Principles of Software Engineering**

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.
- 

### **Open Courses (XXX5DXX)**

#### **BCS5D01| Introduction to Computers & Office Automation**

- To learn Office Automation.

## **BCS6B11-Android Programming**

- To have a review on concept of Android programming.
- To learn Android Programming Environments.
- To practice programming in Android.
- To learn GUI Application development in Android platform with XML

## **BCS5B12-Operating Systems**

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems

## **BCS5B13-Computer Networks**

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

## **BCS5B14- Programming Laboratory III: Lab Exam of V<sup>th</sup> Semester Java & PHP Programming**

- To practice Java programming.
- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through PHP.

## **BCS5B15-Programming Laboratory IV: Lab Exam of Android & Linux shell Programming**

- To practice Android programming.
- To practice user interface applications.
- To develop mobile application.
- To practice shell programming

## **BCS5B16D-Elective Course: Computer Graphics**

- To learn basics of computer graphics

## **BCS5B17-Project Work**

- To provide practical knowledge on software development process

## JUNE-2019

### **BCS1B01 – COMPUTER FUNDAMENTALS & HTML**

- To equip the students with fundamentals of Computer
- To learn the basics of Computer organization
- To equip the students to write algorithm and draw flow chart for solving simple problems
- To learn the basics of Internet and webpage design

### **BCS2B02 – Problem Solving Using C**

- To equip the students with fundamental principles of Problem Solving aspects.
- To learn the concept of programming
- To study C language
- To equip the students to write programs for solving simple computing problems

### **BCS2B03 - Programming Laboratory I: Lab Exam of 1st & 2nd Semester HTML & Programming in C**

- To make the students learn web designing
- To make the students learn programming environments.
- To practice procedural programming concepts.
- To make the students equipped to solve mathematical or scientific problems using C

### **BCS3B04 – Data Structures Using C**

- To introduce the concept of data structures
- To make the students aware of various data structures
- To equip the students, implement fundamental data structure

### **A11 – Python programming**

- Understand various statements, datatypes and functions in Python.
- Develop programs in Python Programming Language
- Understand the basics of OOP Using Python.

### **A12 – Data communication and Optical Fibres**

- To learn various Protocols used in Communication
- To learn A/D and D/A converters

## **BCS4B05 – Database Management System and RDBMS**

- To learn the basic principles of database and database design
- To learn the basics of RDBMS
- To learn the concepts of database manipulation SQL
- To study PL/SQL language

## **A13- Microprocessor Architecture and Programming**

- To understand internals of microprocessor.
- To learn architecture of 8085  $\mu$ P.
- To learn instruction set of 8085  $\mu$ P.
- To learn how to program a  $\mu$ P.

## **A14-Sensors and Transducers**

The students will be able to

- Explain resistance, inductance and capacitance transducers.
- Perceive the concepts of temperature and pressure transducers.
- Perceive the concepts level transducers such as and flow transducers
- Explain Electromagnetic transducers and radiation sensors
- Explain force and torque transducers and sound transducers

## **BCS4B06- Programming Laboratory II: Lab Exam of 3rd & 4th Semester Data Structures & RDBMS**

- To make the students equipped to solve mathematical or scientific problems using C
- To learn how to implement various data structures.
- To provide opportunity to students to use data structures to solve real life problems.

## **BCS5B07-Computer Organization & Architecture**

- To learn logic gates, combinational circuits and sequential circuits
- To learn basics of computer organization and architecture

## **BCS5B08-Java Programming**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B09-Web Programming using PHP**

- To review on concept of OOP.
- To learn Java Programming Environments.
- To practice programming in Java.
- To learn GUI Application development in JAVA.

## **BCS5B10-Principles of Software Engineering**

- To learn engineering practices in Software development.
- To learn various software development methodologies and practices.
- To learn and study various Evaluation methods in Software Development.

## **Open Courses (XXX5DXX)**

### **BCS5D01| Introduction to Computers & Office Automation**

- To learn Office Automation.

### **BCS6B11-Android Programming**

- To have a review on concept of Android programming.
- To learn Android Programming Environments.
- To practice programming in Android.
- To learn GUI Application development in Android platform with XML

### **BCS5B12-Operating Systems**

- To learn objectives & functions of Operating Systems.
- To understand processes and its life cycle.
- To learn and understand various Memory and Scheduling Algorithms.
- To have an overall idea about the latest developments in Operating Systems

## **BCS5B13-Computer Networks**

- To learn about transmissions in Computer Networks.
- To learn various Protocols used in Communication.
- To have a general idea on Network Administration.

## **BCS5B14- Programming Laboratory III: Lab Exam of V<sup>th</sup> Semester Java & PHP Programming**

- To practice Java programming.
- To practice client side and server side scripting.
- To practice PHP Programming.
- To practice developing dynamic websites.
- To practice how to interact with databases through PHP.

## **BCS5B15-Programming Laboratory IV: Lab Exam of Android & Linux shell Programming**

- To practice Android programming.
- To practice user interface applications.
- To develop mobile application.
- To practice shell programming

## **BCS5B16D-Elective Course: Computer Graphics**

- To learn basics of computer graphics

## **BCS5B17-Project Work**

- To provide practical knowledge on software development process