### DEPARTMENT OF COMPUTER SCIENCE

# COURSE OUTCOMES

# SEMESTER – I

#### COMPUTER FUNDAMENTALS AND PHOTOSHOP

CO#	Course Outcome
CO1	Explain the basic knowledge of computer hardware and software. (K3)
CO2	Practice and work on Adobe Photoshop Applications. (K3)
CO3	Create and edit photo albums. (K6)
CO4	Design and edit Banners and visiting cards etc. (K6)

### SEMESTER - I

#### **PROGRAMMING IN 'C'**

CO#	Course Outcome
CO1	Demonstrate the working of a digital computer. (K3)
CO2	Analyse a given problem and develop an algorithm to solve the problem. (K4)
CO3	Apply the 'C' language constructs in the right way. (K3)
CO4	Design, develop and test programs written in 'C'. (K6)

### SEMESTER - II

### **OBJECT ORIENTED PROGRAMMING USING JAVA**

CO#	Course Outcome
CO1	Explain the concept and underlying principles of Object-Oriented
	Programming. (K3)
CO2	Demonstrate how Object-Oriented concepts are incorporated into the Java programming language. (K3)
CO3	Develop problem-solving and programming skills using OOP concept. (K3)
CO4	Develop programming skills in the Java language. (K3)

# SEMESTER - III

#### **DATA STRUCTURES**

CO#	Course Outcome
CO1	Explain how arrays, records, linked structures, stacks, queues, trees, and
	graphs are represented in memory and its applications. (K3)
CO2	Develop programs that use arrays, records, linked structures, stacks, queues,
	trees, and graphs. (K3)
CO3	Compare and contrast the benefits of dynamic and static data structures
	implementations. (K4)
CO4	Describe the concept of recursion, give examples of its use, describe how it
	can be implemented using a stack. (K2)
CO5	Discuss the computational efficiency of the principal algorithms for sorting,
	searching and hashing. (K2)

#### **DATABASE MANAGEMENT SYSTEMS**

CO#	Course Outcome
CO1	Determine database structure and its design. (K3)
CO2	Explain different data models used for database design. (K3)
CO3	Correlate database transactions and data recovery. (K4)
CO4	Employ DML, DDL, DCL commands to manipulate data in the database.
	(K3)

### **SOFTWARE ENGINEERING**

CO#	Course Outcome
CO1	Ability to deduce and specify requirements of the software projects. (K4)
CO2	Analyse software requirements with existing tools. (K4)
CO3	Differentiate different testing methodologies and apply the basic project
	management practices in real life projects. (K4)
CO4	Adapt himself/herself to work in a team as well as independently on software
	projects. (K6)

### **WEB TECHNOLOGIES**

CO#	Course Outcome
CO1	Demonstrate the web architecture and web services. (K3)
CO2	Practice latest web technologies and tools by conducting experiments. (K3)
CO3	Design interactive web pages using HTML and style sheets. (K6)
CO4	Determine the framework and building blocks of .NET Integrated
	Development Environment. (K3)
CO5	Prepare solutions by identifying and formulating IT related problems. (K6)

### **DISTRIBUTED SYSTEMS**

CO#	Course Outcome
CO1	Create models for distributed systems. (K6)
CO2	Apply different techniques learned in the distributed system. (K4)
CO3	Develop the concepts of Inter-process communication. (K3)
CO4	Develop the concepts of Distributed Mutual Exclusion and Distributed
	Deadlock Detection algorithm. (K3)

### **CLOUD COMPUTING**

CO#	Course Outcome
CO1	Compare the strengths and limitations of cloud computing. (K4)
CO2	Illustrate the architecture, infrastructure and delivery models of cloud computing. (K4)
CO3	Apply suitable virtualization concept. (K5)
CO4	Devise the appropriate cloud player, Programming Models and approach. (K4)
CO5	Correlate the core issues of cloud computing such as security, privacy and interoperability. (K4)
CO6	Design Cloud Services and Set a private cloud. (K6)

### **PROJECT**

CO#	Course Outcome
CO1	Develop programming language concepts, particularly Java and Object-
	oriented concepts. (K3)
CO2	Plan, analyze, design and implement a software project or gather knowledge over the field of research and design or plan about the proposed work. (K4,
	K6)
CO3	Demonstrate the ability to locate and use technical information from multiple sources. (K3)
CO4	Demonstrate the ability to communicate effectively in speech and writing. (K3)
CO5	Organise to work as a team and focus on getting a working project done on time with each student being held accountable for their part of the project. (K4)
CO6	Demonstrate software development cycle with emphasis on different processes – requirements, design and implementation phases. (K3, K4, K5, K6)

### SEMESTER - II

### COMMON TO ALL (B.Sc., B.Com., B.A)

### **COMPUTER FUNDAMENTALS AND OFFICE TOOLS**

(	CO#	Course Outcome
	<b>CO1</b>	After the successful completion of course the student would have thorough
		knowledge about concept and principles of computer fundamentals. Student
		would be in a position to work with MS Office Word, MS Excel and Power
		Point presentations.

# SEMESTER - III

COMMON TO ALL (B.Sc., B.Com., B.A)

#### INTERNET FUNDAMENTALS AND WEB TOOLS

CO#	Course Outcome
CO1	After the successful completion of course the student should have thorough knowledge about concept and principles of internet fundamentals and Web
	Tools and Web Applications.