T.Y.B.Sc. (Computer Science)

Subject:-Computer Graphics (SEM I)

(2015-16 Pattern)

#### **Course Outcomes**

CO1:-Students can explain the core concepts of computer graphics, including viewing, projection, perspective, modelling and transformation in two and three dimensions.

CO2:-Students apply the concepts of colour models, lighting and shading models, textures, ray tracing, hidden surface elimination, anti-aliasing, and rendering.

CO3:-Students can interpret the mathematical foundation of the concepts of computer graphics.

CO4:-Students are able to describe the fundamentals of animation, parametric curves and surfaces, and spotlighting.

CO5:-Students will identify a typical graphics pipeline and apply graphics programming techniques to design and create computer graphics.

CO6:-Students will create effective OpenGL programs to solve graphics programming issues, including 3D transformation, objects modelling, colour modelling, lighting, textures, and ray tracing.

T.Y.B.Sc. (Computer Science)

Subject:-Computer Graphics (SEM II)

(2015-16 Pattern)

#### **Course Outcomes**

CO1:-Students can explain the core concepts of computer graphics, including viewing, projection, perspective, modelling and transformation in two and three dimensions.

CO2:-Students will understand how to apply the concepts of colour models, lighting and shading models, textures, ray tracing, hidden surface elimination, anti-aliasing, and rendering.

CO3:-Students can interpret the mathematical foundation of the concepts of computer graphics.

CO4:-Students will able to describe the fundamentals of animation, parametric curves and surfaces, and spotlighting.

CO5:-Students can identify a typical graphics pipeline and apply graphics programming techniques to design and create computer graphics.

CO6:-Students will create effective OpenGL programs to solve graphics programming issues, including 3D transformation, objects modelling, colour modelling, lighting, textures, and ray tracing.

T.Y.B.Sc. (Computer Science)

Subject: System Programming – SEM I (2015-16 Pattern)

### **Course Outcomes**

CO1: Describe the different types of Programming Environment, purpose of editors and types of editors

CO2: Discuss the data structures of Assembler

CO3: Explain Data Structures of Macro pre-processor

CO4: Illustrate the concepts of Interpreter, Compiler Linker and Loader

CO5: Explain types of Debugger and demonstrate how to debug the program

CO6: Describe the Operating system as system software and types of system calls.

T.Y.B.Sc. (Computer Science)

Subject: Operating Systems – SEM II (2015-16 Pattern)

#### **Course Outcomes**

CO1: Students will understand design issues related to process management and various related algorithms

CO2: Students will understand design issues related to memory management and various related algorithms

CO3: Students will understand design issues related to File management and various related algorithms

T.Y.B.Sc. (Computer Science)

Subject: System Programming and Operating Systems Practical (2015-16 Pattern)

### **Course Outcomes**

CO1: Design and implement System programs with minimal features to understand their complexity.

CO2: Design and implement simulations of operating system level procedures.

T.Y.B.Sc. (Computer Science)

Subject: Programming in Java-SEM I (2015-16 Pattern)

#### **Course Outcomes**

CO1: Students will learn Object Oriented Programming language

CO2: Students are able to handle abnormal termination of a program using exception handling

CO3: Students will understand how to create flat files and how to design User Interface using Swing and AWT

T.Y.B.Sc. (Computer Science)

Subject: Programming in Java-SEM II (2015-16 Pattern)

### **Course Outcomes**

CO1: Students will learn database programming using Java

CO2: Students will study web development concept using Servlet and JSP

CO3: Students are able to develop a game application using multithreading

CO4: Students will learn socket programming concept

T.Y.B.Sc. (Computer Science)

Subject: Programming in Java Practical (2015-16 Pattern)

### **Course Outcomes**

CO1: Implement core Java programs to solve simple problems

CO2: Implement Client and Server end Java programs

T.Y.B.Sc. (Computer Science)

Subject: Theoretical Computer Science SEM I (2015-16 Pattern)

#### **Course Outcomes**

CO1: Understand how to design finite state and pushdown automata.

CO2: Understand how to apply the pumping lemma for regular languages to determine if a language is not regular

CO3: Understand the relation between regular language, context free language and corresponding recognizers

CO4: Understand the implement Turing machine

CO5: Understand the theory of Computation

T.Y.B.Sc. (Computer Science)

Subject: Compiler Construction SEM II (2015-16 Pattern)

### **Course Outcomes**

CO1: Understand how to design lexical analyzer and use of Lex tool

CO2: Understand different design issues of a parser and use of Yacc tool

CO3: Understand the different types of parsing techniques

CO4: Understand how to analyse the program and minimize the code by using optimizing techniques

CO5: Understand issues related to memory allocation

CO6: Understand and design code generation schemes

T.Y.B.Sc. (Computer Science)

Subject: Internet Programming I SEM I (2015-16 Pattern)

### **Course Outcomes**

CO1: Students learnt Core-PHP, Server-Side Scripting Language

CO2: Students learnt PHP-Database handling with PostgreSQL and PEAR DB

CO3: Students learnt different functions provided by PHP

CO4: Students got awareness object-oriented features provided in PHP

T.Y.B.Sc. (Computer Science)

Subject: Internet Programming II SEM II (2015-16 Pattern)

### **Course Outcomes**

CO1:Students learnt different technologies used at client-Side Scripting Language

CO2: Students learnt XML, CSS and XML parsers.

CO3: Students learnt Drupal, a CMS framework for effective design of web application (news, blog etc.).

CO4: Students learnt JavaScript to program the behaviour of web pages, client-side validation etc.

CO5: Students learnt AJAX to make webpage applications faster and more dynamic.

T.Y.B.Sc. (Computer Science)

Subject: Lab Course III – Programming in PHP & Project (2015-16 Pattern)

### **Course Outcomes**

CO1: Students understood the process of designing and implementing Web applications, using PHP.

CO2: Students implemented simple PHP programs to solve simple problems using concepts learnt in the Internet Programming I and II.

T.Y.B.Sc. (Computer Science)

Subject: Computer Network – I

(2015-16 Pattern)

### **Course Outcomes**

- CO 1: Understand different types of networks, various topologies and application of networks.
- CO 2: Understand types of addresses, data communication.
- CO 3: Understand the concept of networking models, protocols, functionality of each layer.
- CO 4: Learn basic networking hardware and tools.

T.Y.B.Sc. (Computer Science)

Subject: Computer Network – II (2015-16 Pattern)

### **Course Outcomes**

- CO 1: Learn mechanisms of network layer and security concerns relating to it.
- CO 2: Several devices used in network layers and routing basics.
- CO 3: Addresses needed in different layers for communication.
- CO 4: Regarding Cyber Security and cyber laws.