

## SYBBA-( CA) SEM-I

### I) Data Structure Using C

CO1	To learn the systematic way of solving problem
CO2	To understand the different methods of organizing large amount of data
CO3	To implement efficiently the different data structures
CO4	To implement solutions for specific problems

### II) Relational Database Management System

CO1	To learn fundamental concepts of RDBMS
CO2	To understand principles of databases
CO3	To learn database management operations
CO4	To know about data security and its importance
CO5	To design client server architecture

### III) Operating System

CO1	To understand design issues related to process management and various related algorithms
CO2	To understand design issues related to memory management and various related algorithms
CO3	To understand design issues related to File management and various related algorithms

### IV) Business Mathematics

CO1	To get a relational understanding of mathematical concepts, mathematical reasoning.
CO2	To able to apply their skill & knowledge that is translate the information into the mathematical form.
CO3	To select & use appropriate mathematical formulae or techniques to draw relevant conclusion

## V) Software Engineering

CO1	To learn basics of System Analysis and Design
CO2	To understand principles of Software Engineering
CO3	To know various process models used in practice
CO4	To know the system engineering and requirement engineering

## SYBBA-(CA) SEM-II

### I) Object Oriented Programming using C++

CO1	To understand basic object oriented concepts and the issues involved in effective class design
CO2	To write C++ programs that use object oriented concepts such as information Hiding, , constructors, destructors, inheritance

### II) Visual Basic

CO1	To develop the necessary skills to use a very powerful and popular front-end tool, Visual Basic
CO2	To create an application in Visual Basic, to work with objects and use objects provided by Visual Basic, such as controls, forms, and data

### III) Computer Networks

CO1	To understand different types of networks, various topologies and application of networks
CO2	To learn types of addresses, data communication.
CO3	To be aware about the concepts of networking models, protocols, functionality of each layer.
CO4	To learn basic networking hardware and tools.
CO5	To understand wired and wireless networks, its types, functionality of layer.
CO6	To understand importance of network security and cryptography.

#### IV) Enterprise Resource Planning

CO1	To provide the ERP Business Transformation Strategy to modernize and integrate business processes and systems
CO2	To understand the success of any ERP implementation
CO3	To inform about the goals and objective of enterprise resource planning software implementation

#### V) Human Resource Management

CO1	To introduce to the students the functional department of human resource management and acquaint them with planning, its different functions in an organization
CO2	To introduce the human resource processes that are concerned with planning, motivating and developing suitable employees for the benefit of the organization
CO3	Explain the importance of human resources and their effective management in organizations
CO4	Demonstrate a basic understanding of different tools used in forecasting and planning human resource needs
CO5	Analyse the key issues related to administering the human elements such as motivation, compensation, appraisal, career planning, diversity, ethics, and training.
CO6	Analyse the role of recruitment and selection in relation to the organization's business and HRM objectives
CO7	Research the advantages and disadvantages of induction processes for new incumbents in a role

### **TYBBA-(CA) SEM-I**

#### I) Java Programming

CO1	To handle Object Oriented Programming language
CO2	To handle abnormal termination of a program using exception
CO3	To create flat files
CO4	To design User Interface using Swing and AWT

## II) Web Technologies

CO1	To understanding basic HTML designing
CO2	To learn different technologies used at client Side Scripting Language Learn CSS
CO3	To learn JavaScript to program the behavior of web pages
CO4	To learn Core-PHP, Server Side Scripting Language

## III)VB.Net

CO1	To design and develop Windows-based business applications using Visual Basic.NET programs that meet commercial programming standards
CO2	To design and develop Web based business applications using Visual Basic.NET programs that meet commercial programming standards

## IV)Object Oriented Software Engineering

CO1	To understand importance of Object Orientation in Software engineering
CO2	To understand the components of Unified Modeling Language
CO3	To understand techniques and diagrams related to structural modeling
CO4	To understand techniques and diagrams related to behavioral modeling
CO5	To understand techniques of Object Oriented analysis, design and testing