No	Topics	Details
	CS – 25 Practical Based on CS - 22, CS- 23 and CS -24	

Objectives:
- To apply theoretical concepts through practical applications.
- To develop practical skills in various aspects of JAVA, C# .Net and Shell Scripting

Prerequisites:
- Knowledge of Object Oriented Programming
- Knowledge of DBMS
- Knowledge of computer operating

No	Topics	Details
1	**JAVA Basics with OOP Concepts**	➢ Practically implementation of Java Program which includes: • Java Array • Command Line Argument Array • OOP concepts • Java Access Specifiers and Inheritances • IIB and VARARGs in JAVA • Java Packages
2	**JAVA Exception Handling, Threading and JAVAFx**	➢ Practically implementation of Java Program which includes: • Exception Handling • Threading • Classes of JavaFx • JavaFx UI Controls • JavaFx Listeners, Event Handlers • JavaFx Multimedia
3	**C# Basics**	• Practically implementation of C# program which includes: • Jagged Array • Keywords in C# (Ref, out) • Indexers • Delegates • Collections
4	**C# GUI and ADO .NET**	• Practically implementation of C# program which includes: • Windows Controls • Dialog Controls • MDI Form • Connected Architecture • Disconnected Architecture

5	**Unix Shell Script**	• Unix Shell script which includes:
		  • Redirection and piping
		  • File and directory related command
		  • Finding Pattern in Files
		  • Positional Parameters
		  • Decision, Looping Statements in Script
		  • Logical Operators in Script

Course Outcomes:
- Able to get knowledge about a comprehensive understanding of Object Oriented Programming and their features.
- Student will get practical skills in GUI Development, clear the basics of OS, and implementation of shell scripting too.