Unit	Description	Weightage* (%)
1.	**Introduction to Java** – The Java programming language: history, evolution, features – Introduction to the Java programming environment, JDK, JRE – Introduction to the IDE – Data types and wrapper classes, operators – Control structures – String handling – Basic Input-output	25
2.	**Introduction to Object-oriented Programming** – Basic concepts of object-oriented programming – Classes, instances, methods – Static and non-static members – Packages – Inheritance and polymorphism, method overriding – Final and abstract classes, abstract methods – Interfaces – Generics, enumeration – Inner classes and anonymous classes – Class loaders, class path	25
4.	**Developing Graphical Programs and Database Access** – An introduction to graphics in Java – Brief introduction to AWT – The Swing library – Writing graphical programs using Swing – Using various Swing components – Managing layout using Swing – Event handling using Swing – Introduction to JDBC – Different types of JDBC drivers – Programming database applications using JDBC	25

1.	**Introduction** - Software – meaning and applications - Software Engineering – meaning, goal, challenges and approach - Software Process - Software Development Process Models – waterfall, prototyping, iterative, time boxing and spiral - Introduction to Agile Computing - Agile Software Development Approaches (Scrum, eXtreme - Programming, Feature Driven Development, Dynamic Driven Development) - Collaborative User Story Creation, Retrospectives, Continuous Integration, Release and Iteration Planning	25
2.	**Software Requirement Analysis and Project Management** - Software Development Life Cycle (SDLC) - Software Requirements Specification (SRS) – Need, Process, Problem Analysis, Requirement Specifications, structure and components, Functional Specifications using Use Cases - Software Project Management : Project Planning, various issues addressed in Project Planning, Effort Estimation - Work Breakdown Structure (WBS)	25

1.	**Client-side Web Technologies - I** - Introduction to HTTP and HTML5 - URL format - HTML5 document structure - Headers, body, declarations - Elements, element ID, name, attributes, events - HTML5 media - Forms - HTTP Verbs - Introduction to the DOM - Introduction to CSS3 - CSS3 Syntax - Different properties, values and units - Specifying colors	25
2.	**Client-side Web Technologies - II** - CSS3 selectors, classes - CSS3 precedence rules - Introduction to media query - Introduction to JavaScript - JavaScript syntax - Variables: declaration, data type - Strings, numbers, arrays - Operators - Functions - Variable scope	25
	- Event handling - Client-side form validation - DOM access and manipulation from JavaScript - Built-in objects	

3.	**Server-side Web Development Using PHP – I** - Introduction to server-side scripting - Introduction to PHP - Data types, variables, constants, operators - Flow Control and looping - Strings, arrays, functions - Regular expressions, server-side input validation - Superglobals - Maintaining state: sessions, cookies, query parameters, hidden fields	25
4.	**Server Side Web Development Using PHP – II** - Introduction to MySQL - Database Connectivity in PHP - Introduction to object-oriented programming with PHP	25

1.	**The .NET Technology** - Introduction to .NET Framework - Architecture of .NET framework – BCL (Base Class Library), CLR (Common Language Runtime), etc. - .NET Languages – introduction, Types of applications supported by .NET Technology - Managed code, compilation to intermediate language, Just-In-Time compilation, garbage collection, assemblies and the GAC	25
2.	**Language basics** - C#.NET – Introduction and features - General structure of C#.NET program - C#.NET – basic data types, variables, constants, type conversion - boxing and unboxing - C#.NET – statements (conditional and looping) - Console Applications, Windows Applications - Windows Forms and Life Cycle - User interface controls - Basic Controls, Dialog controls, Menu control	25

Unit	Description	Weightage* (%)
1.	**Introduction to Cybercrime** – Cybercrime : Definition And Origins Of The World – Cybercrime And Information Security – Who Are Cybercriminals? – Classifications Of Cybercrimes – Cybercrime: The Legal Perspectives – Cybercrimes: An Indian Perspectives – Cybercrime And The Indian ITA-2000 – Cyber Offenses: How Criminals Plan The Attacks – Social Engineering – Cyberstalking – Botnets	25
2.	**Tools and Methods Used in Cybercrime** – Password Cracking – Key Loggers And Spywares – Virus And Worms – Trojan Horses And Backdoors – DoS And DDoS Attacks – SQL Injection – Buffer Overflow – Phishing – Identity Theft – Networking Commands	25