I. INTRODUCTION TO WINDOWS MOBILE AND IOS (CREDITS:4)

Section-A

Unit I: Development Environment: Introduction to Visual Studio, Advantages of Using Visual Studio, Setting Up Development Environment, Hello World- First Windows App, Simulators in Windows, Emulators and Debugger

User Interface for Windows Mobile: Introduction to Universal Windows Platform (UWP), Extensible Application Markup Language (XAML), UI Controls, Button, Textbox, Checkbox, Toggle Switch

Unit II: Introduction to C#:Net Framework, C# (C Sharp), Basics of C# language, Keywords, Variable and Datatypes, Operators, Control Statements, Introduction to Classes, Methods, Properties, Constructors and Destructors, Model View Controller (MVC)

Windows Mobile: Layout Controllers and Model, Layout Panels, Navigation Panel, Gesture Control, List of other Controls, Storage in Windows Mobile: Introduction to SQLite, Features of SQLite, Usages and Application of SQLite, Basic Syntax of SQLite

Unit III: Integrating with Web Services in Windows Mobile: Web Services in ASP.NET, Building the Web Services, Discovering and Manipulating a Device, Functions, Multi-Threading in Windows Mobile: Drawbacks of Multi-Threading, Thread Synchronization, UI Threads

Unit IV: Interaction with Camera in Windows Mobile: Introduction to Camera, Evolution of Camera, Types of Camera, Introduction with Hardware, Hardware Limits, Features of a Windows Camera, Windows Phone Camera: Scenes and Effects, Image Capturing, Focusing and Composing the Scenes, Controlling the Light Entering the Camera, Differences between Windows Camera and Others

Development Environment: Introduction to Xcode, Advantages of Xcode, Disadvantages of Xcode, Setting Up Development Environment, Simulators in iOS, Debugger

Section-B

Unit V: User Interface for iOS: Objectives, Introduction to Auto Layout, Introduction to Storyboarding, UI Controls , Introduction to Swift: Introduction to MVC, Objective C vs Swift, Coexistence of Objective C and Swift, Check-in Progress, Playground, Basics of swift, Check-in Progress

iOS Controllers and Model: Top Label Panels (Table Panel, Scroll, etc.), Navigation Controllers, Gesture Handing, Model

Unit VI: Storage in iOS: Introduction, User Defaults /SQLite/Core Data, Usages and Application of Core Data , Integrating with Web Services in iOS: Data Consumption, Functions, Multi-

Threading in iOS: Categories of Thread, Multithreading Models, Thread Synchronization, UI Threats, Background Threads

Interaction with Camera in iOS: Introduction to Camera, Interaction with Camera Hardware, Image Capturing