# 1. i. Explain the main functionality covered by each layer of the four layer iOS technology.

#### Cocoa Touch

A set of frameworks that are used to develop the UI for iOS based devices.

### Media Layer

Also a set of frameworks but this set of API controls the audio, video, and graphics processing needs. Can be interfaced with directly, but these are also interfaced with by other frameworks like SwiftUI to Core Animation or Metal.

#### **Core Services**

Other, typically non-graphical, frameworks that don't fit into the above. These provide a wide range of important services like managing app data, security services, or even managing user calendar events. Also contains frameworks that define many of the data types used in Swift.

#### Core OS

More security features(sandboxing, code signing?), networking, api to take advantage of Apple Silicon's vector processing capabilities.

## ii. List 3 frameworks included in each layer

UIKit, SwiftUI, MapKit

Metal, Core Animation, SpriteKit

Core Data, Cloud Kit, Foundation

Accelerate, OpenCL, System Configuration