

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering Semester End Examination - Jun 2024

Duration : 180 Minutes Max Marks : 100

Sem VI - R1UC609C - Advanced Swift Programming

<u>General Instructions</u> Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

1) 2)	Explain the concept of table views in iOS development. Describe the similarities between collection views and table views in iOS development, particularly in terms of architectural principles and functionality.	K1(2) K2(4)
3)	Explain the concept of protocols in Swift and how they enable defining blueprints for methods, properties, and behaviors that types can adopt.	K2(6)
4)	Implement a custom Table View for a Lifestyle App.	K3(9)
5)	Design a custom collection view layout with unique item arrangements and animations.	K3(9)
6)	Analyze the impact of data presentation on user engagement and retention in iOS apps.	K5(10)
7)	Analyze the impact of generics on code readability and maintainability in iOS app development.	K4(12)
8)	Provide an example of a custom type that conforms to the Equatable protocol in Swift and demonstrate how equality is determined for instances of that type.	K5(15)
9)	Judge the effectiveness of different strategies for handling dynamic data updates in iOS apps.	K5(15)
10)	What is Codable in Swift, and how does it simplify the process of encoding and decoding objects to and from external representations like JSON?	K6(18)