School of Computing Science and Engineering
Bachelor of Technology in Computer Science and Engineering
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem V - E2UC514B - Swift Programming

General Instructions
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) Define a Swift structure, "Person," with data members such as AadharNo, name, and PanNo, and implement a memberwise initializer to accept data for five objects, exemplifying Swift's initialization methods. — K3 (6)

2) Identify and describe the key characteristics of computed properties in Swift, and demonstrate the creation of a computed property within a Swift struct, showcasing their utility in dynamic data manipulation. — K3 (9)

3) You want your fitness tracking app to give as much encouragement as possible to your users. Create a variable steps equal to the number of steps you guess you've taken today. Create a constant stepGoal equal to 10,000. Write an if-else statement that will print "You're almost halfway there!" if steps is less than half of stepGoal, and will print "You're over halfway there!" if steps is greater than half of stepGoal. — K4 (8)

4) Create Swift Structure and functions with different initializers for temperature conversion, underscoring the importance of mathematical precision and scientific computing within the software domain. — K5 (15)

5) Explore the types of initializers in Swift, encompassing designated, convenience, and failable initializers, while providing compelling examples that lay bare their intricate roles in the realm of object creation and error mitigation. — K6 (12)