SOMAIYA VIDYAVIHAR UNIVERSITY

Semester: January 2025-April 2025		
Maximum Marks: 30M	**Examination: In-Semester Examination**	**Duration: 1 Hr. 30 min**
Programme code: 05 **Programme: Honors in Software & Mobile Application Development**	**Class: SY**	**Semester: IV (SVU2023)**
Institute/School/ Department: **K. J. Somaiya School of Engineering**	**Name of the department: COMP**	
Course Code: 216H05C401	**Name of the Course: Fundamentals of Swift**	

Question No.	SET-II	Max. Marks
Q1	Answer any **TWO** of following: 1. Differentiate between `if-let` and `guard` statements in Swift when handling optionals. Provide an example for each. 2. What is `@autoclosure` in Swift? How does it work, and in what scenarios is it useful? Provide an example to demonstrate its usage. 3. How can an **enum** have computed properties and methods in Swift? Provide an example. 4. What are failable initializers in Swift structs? Explain it with the help of an example.	10 M
Q2	Calculate and display the user's Body Mass Index (BMI). **Features:** • `UISlider` for users to input **height (in cm)** and **weight (in kg)**. • Two `UISlider` components for users to select their weight and height. • A `UITextField` for entering age. • A `UISwitch` for selecting gender. • `UIButton` to **calculate BMI**. • `UILabel` to display **BMI result and category** (Underweight, Normal, Overweight, Obese). **BMI Calculation:** • Upon tapping the "Calculate BMI" button, compute the BMI using $$\text{BMI} = \frac{\text{Weight (kg)}}{(\text{Height (m)})^2}$$ • Display the calculated BMI along with a category interpretation (e.g., underweight, normal weight, overweight, obese) in a `UILabel`.	20 M