

Semester: July 2023 – Oct 2023		
Maximum Marks:30	Examination: In-Semester Examination	Duration:1hr 15 min
Programme code: 01 Programme: B.Tech	Class: SY	Sem: III (SVU 2020)
Name of the Constituent Colleges: K. J. Somaiya College of Engineering	Name of the department: COMP	
Course Code: 116U01C304	Name of the Course: Object Oriented Programming Methodology	

Q No.	Questions	Max. Marks	CO	BT
Q1	<p>Attempt any two of the following</p> <p>A. Explain the significance of vectors over an array of objects with an example. (5M)</p> <p>B. Explain Garbage Collection in Java with an example. (5M)</p> <p>C. Explain with a program the use of the keyword 'this'. (5M)</p>	10	CO1, CO2	RE, UN
Q2	<p>Write a Java program to create a Groceries class containing the following data members' - product name, price, and expiry date (dd/mm/yyyy format) as attributes for n products.</p> <p>Perform the following operations:</p> <p>A. Set the data to the Groceries object using either a constructor or method. (3M)</p> <p>B. Sort details of the product according to product price. (Do not use the inbuilt function for sorting). (5M)</p> <p>C. Display the final sorted list of products. (2M)</p> <p style="text-align: center;">OR</p> <p>Write a Java program to find the longest Palindromic Substring within a string.</p> <p>Sample Output:</p> <p>The given string is: thequickbrownfoxxofnworbquickthe</p> <p>The longest palindrome substring in the given string is - brownfoxxofnworb</p> <p>The length of the palindromic substring is: 16</p>	10	CO2, CO3	AP
Q3	<p>What is the significance of a constructor? Explain constructor overloading with an example.</p>	10	CO1 C03	RE, UN
