



SOMAIYA
UNIVERSITY

Maximum Marks:30	Semester: July 2023 – Oct 2023	Duration: 1hr 15 min
Programme code: 01	Examination: In-Semester Examination	
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
Q1	Attempt any two of the following A. Explain the significance of vectors over an array of objects with an example. (5M) B. Explain Garbage Collection in Java with an example. (5M) C. Explain with a program the use of the keyword 'this'. (5M)	10
Q2	Write a Java program to create a Groceries class containing the following data members' - <u>product name</u> , <u>price</u> , and <u>expiry date</u> (dd/mm/yyyy format) as attributes for n products. Perform the following operations: A. Set the data to the Groceries object using either a constructor or method. (3M) B. Sort details of the product according to product price. (Do not use the inbuilt function for sorting). (5M) C. Display the final sorted list of products. (2M) OR Write a Java program to find the longest Palindromic Substring within a string. Sample Output: The given string is: thequickbrownfoxxofnworquickthe The longest palindrome substring in the given string is - brownfoxxofnworb The length of the palindromic substring is: 16	10
Q3	What is the significance of a constructor? Explain constructor overloading with an example.	10
