

K. J. Somaiya College of Engineering, Mumbai-77

End Semester Exam

December 2020

Max. Marks: 30

Duration: 1 Hr. 15 Min. (For attempting questions) + 15 min. (uploading)

Class: SY

Semester: III

Name of the Course: Object Oriented Programming Methodology

Branch: Computer Engineering

Course Code: 2UCC304

Instructions:

- (1) All questions are compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary
- (4) Programs are expected with suitable output test cases

Question No.		Max. Marks
Q.1	<p>Create 3 Vectors Bank, Deposit, Withdraw. Perform following operations:</p> <ol style="list-style-type: none">(a) New Customer – Data should be added in bank vector.(b) Withdrawal of requested amount if the customer exists in bank vector. The account no, withdrawal amount and date should be added into the withdrawal vector and the amount should be deducted from balance in bank vector.(c) Deposition of requested amount if the customer exists in bank vector. The account no, amount and date should be added into the deposit vector and the amount should be added in to the balance in bank vector.(d) View the contents of an account. <p>Display all details using Enumeration interface and Switch case.</p> <p style="text-align: center;">OR</p> <p>Implement Online Banking System for Joint account. (Maximum 3 login credentials needs to be created for access the system) Which Provide following functions: (Using multithreading)</p> <ol style="list-style-type: none">1. Customers can view the available balance.2. Customer can withdraw the amount.3. Customer can Deposit the money. <p>Create three separate threads to show all mentioned functionalities.</p>	10
Q.2 A	<p>Write a program to define a base class called Person having class members Name and age. Accept the person information in the constructor of the Person class and create a display method to display the person information. Create class Student derived from Person class. Student class has roll number as class members. Accept the student specific information in the constructor of the Student class and use the constructor of the Person class to accept the name and age of the student. The student class has a display method which displays the student information. In this display method use the display method of the Person class to display the name and age of the student. The Student class defines a isEligible() function which verifies whether the student is eligible for voting or not. Write an appropriate main method which accepts the information of a student from the user and displays whether the student is eligible for voting or not.</p> <p>Note: Accept n records either using array of object or using Vector Class.</p>	05
Q.2 B	<p>Describe the various forms of implementing interfaces. Give example of java code for each case.</p>	10

Q.3	<p>Describe the functions of the file class? (Any five classes with Example)</p> <p>OR</p> <p>Draw the class diagram for result generation system. Assume suitable data (if required). Write your assumptions clearly. Show the relations between all the classes and label the relations properly. Also show the multiplicity according to your assumption.</p>	05
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