



# ST. FRANCIS DE SALES COLLEGE

A FRANSALIAN INSTITUTE OF HIGHER EDUCATION **AUTONOMOUS**

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## END SEMESTER EXAMINATION – AUGUST 2025 COMPUTER SCIENCE- II SEMESTER MCA 24MCA21 – OBJECT ORIENTED PROGRAMMING USING JAVA

**Time: 3 Hours**

**Max. Marks: 70**

**Instruction:** Answer should be written completely in English.

### SECTION - A

Answer any **FIVE** questions. Each question carries **SIX** marks each. (5X6=30)

1. Write a program to illustrate classes, objects and constructors.
2. Compare method overloading and method overriding with a suitable example.
3. Develop an application using packages.
4. Justify why Java doesn't support multiple inheritance through classes.
5. Write a Java Program to demonstrate JDBC SQLException.
6. Create a class with exception handling for division by zero.
7. Create a simple JavaFX app with a label, a text field, and a button. When the button is clicked, show the text below.
8. Apply VBox and GridPane layouts to create a login page.

### SECTION - B

Answer any **FOUR** questions. Each question carries **TEN** marks each. (4X10=40)

9. Compare abstract classes and interfaces with suitable examples.
10. Develop a generic class and method to perform addition of any two numeric types.
11. Write a program where all vehicles can start and stop. Add a special feature for buses to show the route using abstract classes and interfaces.
12. Write a program to demonstrate Java Collection.
13. Design a small JavaFX Application that displays a menu.
14. Create a JavaFX app with a button and a label to show the number of times the button is being clicked.

