# **Department of Information and Communication Engineering**

Pabna University of Science & Technology Faculty of Engineering & Technology

Course Code: ICE-3202 Course Title: Network Programming with Java Sessional

# **Program List**

#### GUI:

- 1. Write a Java program to load and display multiple images into a swing container.
- 2. Suppose a restaurant sells Pizza for \$100, Burgers for \$30, and Tea for \$10. Write a Java program for generating restaurant bills after ordering from a customer.
- 3. Write a Java Program to create a student registration form for ICE department including the fields "Name", "Roll", and "Department" in GUI.
- 4. Write a Java Program in GUI to develop a simple calculator that can calculate addition, subtraction, division, and multiplication operations.

### Thread:

5. Suppose multiple threads try to access the same resources and finally produce erroneous and unforeseen results. Write a java program to solve this problem using object or method synchronization.

#### Socket:

- 6. Write a client-server TCP socket program in java that the server listens for connection requests, and whatever message the client sends, the server converts it to uppercase and sends it back.
- 7. Write a client-server UDP socket program in java that the server listens for connection requests, and whatever message within 1024 bytes the client sends, the server converts it to uppercase and sends it back after 6 ms.

## JDBC:

- 8. Suppose we have an MS Access database named ICE\_PUST which has a table named by Student with field (Name, Email, and Phone). Using this database answer the following questions:
  - a. Write down a java program to insert data into the Student table of the ICE\_PUST database.
  - b. Create a java program to print all student records from the Student table of the ICE PUST database.

- 9. Consider an MS access database named Lab\_18 which has a table named by Teacher with field (Name, Email, and Phone). Using this database give the answer of the following questions:
  - a. Write down a java program to create a GUI registration form according to the Teacher table.
  - b. Create a java program to insert data into the Teacher table of the Lab\_18 database from the GUI registration form which you have already created.