# Tribhuwan University Institute of Science and Technology

## 2070

### **Advanced Java Programming**

Full Marks: 60 Pass Marks: 24 Time: 3 hours

#### **New Course**

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

#### Section A (2\*10=20)

#### Attempt any two questions.

- 1.) What is interface? How can you use the concept of interface to achieve multiple inheritance? Discuss with suitable example.
- 2.) Write a program using swing component to multiply two numbers. Use text fields for input and output. Your program should display the result when the user press a button.
- 3.) What is RMI? How can you use RMI to develop a program that runs in different machine? Discuss with suitable example.

#### **Section B**

Attempt any eight questions. (8\*5=40)

- 4.) What is JDBC? How do you execute SQL queries in JDBC?
- 5.) What is java beans? How is it different from java class?
- 6.) Write a simple java program to read from and write to files.
- 7.) Discuss different methods used in life cycle of servelet.
- 8.) Discuss border layout with suitable example.
- 9.) Why multithreading is important in programming? Discuss.
- 10.) Discuss any 5 exception classes in java.
- 11.) Discuss the role of event listeners to handle events with suitable example.
- 12.) What is socket? How can you communicate two programs in a network using TCP Socket?
- 13.) Write a simple JSP program to display "Lalitpur, Nepal" 10 times.