

Tribhuvan University
Institute of Science and Technology
2074

Bachelor Level / seventh-semester / Science Full marks: 60 **Computer Science and Information Technology(CSC409)** Pass marks: 24 (Advanced Java Programming) Time: 3 hours Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Group A

Attempt any two questions (2x10=20)

1. Define inheritance. Discuss the benefits of using inheritance. Discuss multiple inheritance with suitable example.(1+2+7)
2. Why do we need event handling? Discuss the process of handling events with examples. Differentiate event listener interface with adapter class. (3+4+3)
3. Write a program using swing components to find simple interest. Use text fields for inputs and output. Your program should display output if the user clicks a button. (10)

Group B

Attempt any eight questions. (8x5=40)

4. Write an object oriented program to find area and perimeter of rectangle. (5)
5. Write a simple java program that reads data from one file and writes the data to another file (5)
6. Discuss grid layout with examples.
7. What is an action event? Discuss (5)
8. How do you execute SQL statements in JDBC? (5)
9. What is a socket? How can you write java programs that communicate with each other using TCP sockets?
(1+4)
10. Write a Java program using servlet to display "Tribhuvan University". (5)
11. Discuss property design patterns for Java Beans. (5)
12. What is CORBA? How is it different from RMI? (2+3)
13. Write short notes on: (2.5+2.5)
 - a) Multithreading
 - b) JSP