



**Tribhuvan University**  
**Faculty of Humanities & Social Sciences**  
**OFFICE OF THE DEAN**

**2024**

**Bachelor in Computer Applications**

**Course Title: Advanced Java Programming**

**Code No: CACS 354**

**Semester: VI**

**Full Marks: 60**

**Pass Marks: 24**

**Time: 3 hours**

**Candidates are required to answer the questions in their own words as far as possible.**

**Group B**

**Attempt any SIX questions.**

**[6×5 = 30]**

2. What is the use of WindowEvent? List different methods of WindowListener interface with its uses. [3+2]
3. How can you display images in GUI using Java? Explain. [5]
4. Why do we need to create Javabeans? Explain the steps involved in creation of Javabean. [1+4]
5. What is the use of PreparedStatement? Differentiate between Statement and PreparedStatement. [1+4]
6. What are declaration and expression tags in JSP? Explain with example. [2.5+2.5]
7. What is RMI? Write a RMI client and server program to find the greater number among two numbers. [1+4]
8. Write short notes on:(Any two) [2.5+2.5]
  - a) JMenuBar
  - b) Session handling in Servlet
  - c) Marshalling and Unmarshaling of arguments in RMI

**Group C**

**Attempt any TWO questions.**

**[2×10 = 20]**

9. Why do we need to use layout managers in GUI programming? Write a program to create a GUI form that takes data about a customer including cid, name, address, email and age and insert these data into the Customer table of the Shop database. [2+4+4]
10. Explain the lifecycle of Java Servlet. Write a servlet program that takes three numbers from an HTML page and computes the sum of natural numbers upto the greatest number among three numbers. [4+6]
11. What is directive element in JSP? Explain in detail. Create a JSP page that verifies the username and password entered form an HTML file and if the username and password are correct it displays greetings message. Otherwise redirects to register page. [4+6]