

# SIMON FRASER UNIVERSITY

## Sample Final Exam

BUS 418  
International Finance

**Rules for Submitting Assignments:** Answers to questions are to be typed, single spaced, of length no more than 1 page for each of the four questions selected, with 1" margins and type point not less than 12. (This exam is typed in 12 point.) Violations will be subject to deductions. Assignment is due in my office no later than Dec. 10, 2002.

**Answer all parts of the questions:**

1. Explain the put-call parity arbitrage for European spot and forward currency options. How can this condition be used to structure a portfolio which uses a foreign bond/domestic bond portfolio to replicate the payoff for an insured portfolio containing a foreign bond and a currency put option?
2. Under what conditions will puts and calls for American currency options be exercised early? What distribution free properties of European and American options were needed to develop the early exercise condition? Explain the early exercise condition using the Garman-Kohlhagen option pricing formula.
3. When is hedging foreign assets effective? What is the optimal currency hedge ratio for a portfolio which contains only one foreign asset?
4. Outline the continuous time derivation of the Garman-Kohlhagen (Black-Scholes) option pricing model for both spot and forward currencies. What assumptions are being made to derive the results?