SIMON FRASER UNIVERSITY

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 Wed. Dec. 13, 2000.

**Answer all parts of the four questions** (25 points each):

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.a) When is hedging foreign assets effective?

b) What is the optimal currency hedge ratio for a portfolio which contains only one foreign asset?

4. "Mean-variance analysis has serious shortcomings that are too often ignored. Perhaps the most serious defect is the poor out-of-sample performance of the optimal portfolios. Another problem is the instability in the optimal portfolio: the proportions allocated to each asset are extremely sensitive to variations in expected returns, and adding a few observations may change the portfolio distribution completely. Also, optimal portfolios are not necessarily well diversified." (Jorion, 1985)

Comment on the implications of this statement for the management of internationally diversified portfolios. In particular, be sure to 1) state what is meant by mean-variance analysis. In addition, be sure to address the implications of: 2) different possible specifications of the optimization problem.