DEPARTMENT OF BANKING AND FINANCE
FINA 521/621 - INVESTMENT APPRAISAL
Midterm Sample Questions

QUESTION 1

(a) What are the different stages in the project planning and implementation cycle?

(b) Why is it important to have demand module in a pre-feasibility of a project? What information does it provide?

QUESTION 2

Suppose you know that the discount rate for the period from the beginning of year zero to the end of year zero is 2%, likewise for year one it is 3%, for year two it is 4%, for year three it is 5%, and for year four it is 6%, for year five it is 7%, and remains at 7% for the years following. Assume also that you have a stream of benefits from a project starting at the beginning of year zero and continuing to the beginning of year seven as follows: B_0, B_1, B_2, B_3, B_4, B_5, B_6, B_7.

(a) What are the discount factors that you would apply to the benefits for the beginning of year six if you were evaluating its present value from the perspective of the beginning of year four?

(b) What is the NPV from year 3 perspective?

QUESTION 3

(a) For a given rate of inflation in South Africa, in what way will a lower rate of inflation in the USA alter South Africa's **equilibrium market exchange rate**, Rand/US$? Explain.

(b) How would a lower rate of inflation in South Africa be expected to alter the **nominal interest rates** in South Africa? Explain.

(c) How does an expected increase in the real exchange rate $\left(\frac{\#R}{\$}.\frac{I^{US}}{I^{SA}}\right)$ over time affect a country's **real rate of interest**?

QUESTION 4

In a pre-feasibility study of an investment project, land was recorded as expenditure in year 0 in the cash flow statement at its market value of $1 million.

(a) Under what conditions, should one use a real residual value (i.e. the value at the end of the project) for land that is greater than $1 million? Explain.

(b) Under what conditions, would one use a real residual value for land less than $1 million? Explain.

(c) Under what condition would one use a real residual value for land equal to $1 million?

QUESTION 5

Explain the relationship between (i) cash receipts and sales, (ii) cash expenditures and purchases, (iii) increases in the desired level of cash balances and the net cash flow of project.

QUESTION 6 (TRUE or FALSE)

Briefly explain why the following statements are true, false or uncertain.

1. Suppose during first one or two years of a project life, there is a decision to have larger quantities of inventories of raw material and finishing products. This will cause the net cash flow of the project to fall during these years.
2. Suppose the loan life coverage ratio, LLCR, is satisfactory for entire period that the debt is outstanding. Then it must be the case that each of the annual debt service coverage ratios, ADSCR, during this period must also be satisfactory.
3. Increases in the value of any land used by a project should always be included in the benefits of a project.

QUESTION 7

Please indicate whether each of the variables listed below should be included in the cashflow or resource flow from each of the perspectives shown below. Use a check mark (✓) if it should be included and (X) if should not be included. If it is included in the cashflow or resource flow also indicate if the item is an inflow (+), an outflow (–) or could be both (+ or –).

	Owner	Total Invested Capital (Banker's)	Gov't Budget
• Income taxes paid	----------	----------	----------
• Increases in accounts payable	----------	----------	----------
• Tax depreciation expense	----------	----------	----------
• Cash purchases of inputs for production	----------	----------	----------
• Decrease in the desired amount of cash balances needed by project	----------	----------	----------
• Loan Repayment	----------	----------	----------
• Equity holder's contribution for financing the project	----------	----------	----------
• Operating subsidy from government	----------	----------	----------
• A government gift of land to a project	----------	----------	----------
• Increase in bad debts	----------	----------	----------
• Corporation income taxes paid by the project	----------	----------	----------
• Purchase of Land by project	----------	----------	----------
• Increases in accounts receivable	----------	----------	----------
• Payments of wages to Labor	----------	----------	----------
• Revenue from Water Sales	----------	----------	----------