NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE HONOURS DEGREE IN ACCOUNTING, ACTUARIAL SCIENCE, BANKING, FINANCE, FISCAL STUDIES, MANAGEMENT, MARKETING, RISK & INSURANCE
PART II SUPPLEMENTARY EXAMINATION – AUGUST 2011

CORPORATE FINANCE [CFI 2101]

TIME ALLOWED : 3 HOURS

Instructions

1. The paper is 3 hours. Candidates may write on the question paper but shall not write in the answer book during reading time.
2. Answer any **ALL** questions in Section A and any **Three** questions in Section B.
3. Electronic calculators may be used.
4. All workings to be shown.
5. Answers to be written only on the top pages.

SECTION A (Compulsory)

Half Way Manufacturing Co. Ltd has found that, after only two years of using a machine for a semi-automatic process, a more advanced model has arrived on the market. This advanced model will not only produce the current volume of the company's product more efficiently, but allow increased output of the product. The existing machine had cost $32,000, and was being depreciated straight-line over a ten-year period, at the end of which it would be scrapped. The market value of this machine is currently $15,000 and there is a prospective purchaser interested in acquiring it.

The advanced model now available costs $123,500 fully installed. Because of its more complex mechanism, the advanced model is expected to have a useful life of only eight years, with a scrap value of $20,500.

The table below provides a summary comparison of the two machines;

	Existing Machine	New Model
	$	$
Capacity per annum	200,000 units	250,000 units
Selling price per unit	0.95	0.95
Production costs per units		
Labor	0.12	0.08
Materials	0.48	0.46
Fixed Overheads (allocation of portion of company's fixed overheads)	0.25	0.16

Recently a market survey was conducted and it has revealed that the additional output could be sold at $0.95 per unit. If the advanced model were to be run at the old production level of 200,000 units per annum, the operators would be freed for a proportionate period of time for reassignment to the other operations of the company. The Marketing Department, based on the survey, has suggested that the advanced model should be purchased, by the company to replace the existing machine.
The company's cost of capital is 15%

Required:

a. Determine the following for the replacement project;
   - i. Operational cash flows [8 marks]
   - ii. The Net Present Value (NPV) [6 marks]
   - iii. The Internal Rate of Return(IRR) [8 marks]

b. What recommendations would you make to the company? What other factors need to be considered before a final decision is made [3 marks]

c. What specific considerations should be made when determining the terminal cash flows of a project? [3 marks]

e. Using examples from the above case define incremental cash flows; and outline clearly why only incremental cash flows are relevant in capital budgeting [5 marks]

f. You are further advised that the following additional information has been gathered;
Market Risk Premium = 5%, Discount on 10 year Government Bonds is at 9%, and similar risk companies have a beta of 0.90. Explain what impact will this have on the NPV in a (ii) above? State and explain any two critical assumptions that you have made. [2, 5 marks]

SECTION B: ANSWER ANY THREE QUESTION FROM THIS SECTION

Question Two

a. Within the financial management context, discuss the problems that might exist in the relationships (also known as agency relationships) between:
   - i. Shareholders and managers [5 marks]
   - ii. Creditors and managers [5 marks]

b. How might a company attempt to minimize the problems in (a) above [10 marks]

Question Three

Ashanti Holdings recently acquired a controlling interest in Shandon Engineering, which produces high-quality machine tools for the SADC market. Following this acquisition, the internal audit department of Ashanti Holdings examined the financial management systems of the newly acquired company and produced a report that was critical of its investment appraisal procedures. The report stated that:

> *Overall, investment appraisal procedures in Shandon are very weak, Evaluation of capital projects is not undertaken in a systematic manner and post-decision controls relating to capital projects are virtually non-existent.*

Prepare a report for the directors of Shandon Engineering, stating what you consider to be major characteristics of a system for evaluation, monitoring and controlling capital expenditure projects. Clearly, indicating the procedures that should be adopted for approving and reviewing large capital expenditure projects. [20 marks]

Question Four

The following information relates to expected returns of two independent projects of Site Construction;

Sate of the Economy	**Probability (pi)**	**Expected Return**	
		X	**Y**
Expansion	0.25	5%	32%
Normal	0.50	15%	14%
Recession	0.25	25%	4%

a. Calculate the expected return of each project. [2 marks]

b. Find the standard deviation of each project. [4 marks]

c. Determine the covariance and correlation-coefficient of the two projects and comment on your findings. [5 marks]

d. If an investor wanted to portfolio consisting of the two projects above, determine what proportion of their investment should be invested in each project to minimize risk. What is the expected return and standard deviation of such a portfolio? [2,1,2 marks]

e. Suppose the above projects where mutually exclusive, which one would you choose and why? [2 marks]

Question Five

(a) An investor purchases Econet Shares and Hippo Valley Shares hare on the 1st of June 2009, when the share prices are $22.50 and $15.00 respectively. On the 31st of May 2010, the investor disposes both shares (after receiving a dividend of $3.05 on Econet shares and $1.50 on Hippo Valley shares) for $24.00 and $16.40 respectively.

i. Calculate the Holding period return of each investment. [2 marks]

ii. Which share performed better? [2 marks]

(b) Given that the return on the Zimbabwe Stock Exchange is 14% and the return on RBZ Treasury Bills is 9%, and the beta of Econet is 1.5, and the beta of Hippo Valley if 0.75. what action would you take, suppose you hold 100 shares of Econet and 200 shares of Hippo Valley. [6 marks]

(c) Outline the key assumptions underlying the Capital Asset Pricing Model (CAPM) [10 marks]

Question Six

a. Site Investment Pvt Ltd, a manufacturing firm based in Bulawayo, is considering to get listed in the Zimbabwean stock exchange. Advise the management and Board of Site Investment on the advantages and disadvantages that may accrue *to the firm and its shareholders,* by obtaining a full stock exchange listing. [20 marks]

End of Paper

Good Luck!!!!!