

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE

DEPARTMENT OF FINANCE

BACHELOR OF COMMERCE HONOURS DEGREE IN

Accounting; Finance; Banking

Insurance & Risk Management

Actuarial Science

Marketing; Management

PART II Ist SEMESTER FINAL EXAMINATION - JAN/2008

CORPORATE FINANCE I [CFI 2101]

TIME ALLOWED: 3HOURS

INSTRUCTIONS

- ◆ **ANSWER ALL QUESTIONS**

QUESTION 1

“Wal-Mart Stores, the world’s largest retailer, paid its chief executive, H Lee Scott Jr., \$29.7 million last year after sales grew at the slowest pace for more than two decades. Mr. Scott, 58, received a salary of \$1.3 million and stock valued at \$15.3 million, Wal-Mart said yesterday in a regulatory filing. The company, based in Bentonville, Ark, also awarded him bonuses of \$4.29 million and \$8.08 million in stock options. Mr. Scott’s pay trailed the \$36.4 million earned by the chief executive of Target Corporation, Robert J Ulrich, who oversaw a 16% increase in net income last year. Wal-Mart’s profit was almost unchanged and sales at stores open at least a year rose 2.1%, the smallest gain in at least 27 years....”

Source: Bloomberg News, April 20, 2007

- 1.1 Making references to Zimbabwean companies, explain how the “agency problem” arises? [5]
- 1.2 What agency cost/s are the shareholders of Wal- Mart are incurring? [5]
- 1.3 If the shareholders of Wal-Mart are unhappy with the performance of the CEO, what actions can they take? [5]
- 1.4 How effective are the actions you have cited in 1.2. above. [10]

QUESTION 2

CFI, a company listed on the ZSE has spent \$5,000 on research and development concerning an investment in machinery, which would improve operational efficiency. The machinery, which costs \$100,000, has a five-year life and a zero residual value. If the machinery is purchased it will be depreciated on a straight-line basis. Indirect material needed to operate the machinery is in stock and has a resale value of \$3,000 per annum.

Estimated cash inflows arising from the investment over its 5-year life are \$30,000 per annum after deducting depreciation costs on the machinery but before deducting operating costs. Operating costs include:

- Variable costs of \$10,000 per annum;
- Allocated fixed costs of \$15,000 per annum;
- Additional foreman at a cost of \$12,000 per annum.

The firm has a cost of capital of 10%.

2.1 Advise the company on whether or not this investment initiative is worth pursuing? [10]

2.2 Discuss the advantages and disadvantages of discounted cash flow methods of investment appraisal [15]

Question 3

(a) NUST Corporation is a holding company with four main subsidiaries. The percentage of its business coming from each of the subsidiaries, and their respective betas, are as follows:

<u>Beta and Required Rate of Return</u>		
Subsidiary	Percentage of Business	Beta
Applied Science	60%	0.7
Commerce	25%	0.9
Sports Science	10%	1.3
C.C.E.	5%	1.5

3.1 Calculate the holding company's beta? [2]

3.2 Assuming that the risk free rate is 6% and the market risk premium is 5%. What is the holding company's required rate of return? [3]

3.3 NUST is considering a change in its strategic focus; it will reduce its reliance on the Applied Science Subsidiary, so the percentage of its of its business from this subsidiary will be 50%. At the same time NUST will increase its reliance on the C.C.E. division, so the percentage of its business from that subsidiary will be 15%. What will be the shareholders' required rate of return if they adopt these changes? [3]

3.4 Giving reasons to your answer do you consider the move in 3.3 above to be appropriate? [2]

(b) Given the following information:

	Event	Return	Probability
Security x	A	40%	1/3
	B	30%	1/3
	C	20%	1/3
Security y	A	10%	1/3
	B	20%	1/3
	C	30%	1/3

- 3.5 Calculate, for each security, Expected return, Variance, and Standard deviation. [10]
- 3.6 Calculate the co-variance and the correlation coefficient between the two securities. [3]
- 3.7 What do you deduce from your answers in 3.5 above? [2]

Question 4

4.1 IBM announced its 1982 earnings per share (EPS) for the fourth quarter of 1982 on Friday, January 21, 1983. EPS was up 28% from the fourth quarter of 1981. Nevertheless, IBM's stock price dropped by \$3.25 to \$94.625. Security analysts explained the price drop by noting that an unexpectedly large part of the increase was due to an accounting restatement required by the Financial Accounting Standards Board's order FASB 52. The "true" increase in EPS was thought to be correspondingly less.

On Monday, January 24, IBM's stock price dropped by \$0.75 more, although overall market indexes were down sharply (-2.75%). Later in the day, IBM issued a statement clarifying the impact of the FASB 52. IBM's EPS would have been just as high under prior accounting rules (FASB 8). "The confusion on Friday was that we didn't have enough detail," said Barry Tarasoff, an analysts at Goldman, Sachs and Co. "well, we got it today, and the fourth quarter looks fine".

On Tuesday, IBM's stock price rose by \$2.125.

Is this an efficient market at work, and which form? Discuss carefully. [10]