# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY <br> FACULTY OF COMMERCE DEPARTMENT OF FINANCE 

## B.COMM HONORS IN MANAGEMENT, MARKETING, BANKING, ACCOUNTING, FINANCE, RISK MANAGEMENT AND ACTURIAL SCIENCE

## CORPORATE FINANCE CFI 2101

## SUPPLEMENTARY EXAMINATION

SEPTEMBER 2010

## Instructions

- Answer any five questions


## Question 1

(a) Explain the concept of the Agency Problem/ Agency theory. (6 marks)
(b) What initiatives can company/shareholders take to minimize the Agency problem?
(14 marks)

## Question 2

(a) You are given the following information pertaining to two projects, A and B.

|  | A | B |
| :---: | :--- | :--- |
| Initial Outlay | $\$ 120000$ | $\$ 90000$ |
| Cash flow: Year 1 | 20000 | 70000 |
| Year 2 | 60000 | 20000 |
| Year 3 | 20000 | 30000 |
| Year 4 | 70000 | 10000 |
| Year 5 | 10000 | 10000 |

(i) Use the following the Net Present Value and Internal Rate of Return methods to choose the better project.
(ii) Why do the two methods sometimes give conflicting results? (6 marks)
(iii) Highlight the draw backs of the Internal Rate of Return method. (6 marks)

## Question 3

(a)You are given that the Beta of Econet share is 1.5 , the return on government securities is $13.5 \%$ while the return on the Zimbabwe Stock Exchange is $18 \%$.
(i) Interpret the Beta of the Econet Share
(3 marks)
(ii) Illustrate the given information diagrammatically in relation to the Capital Asset Pricing Model.
(5 marks)
(iii)If the actual return on Econet Share is $24 \%$, is the share undervalued or overvalued?

Explain your answer.
(4 marks)
(b) Given that asset A and B have returns of $24 \%$ and $30 \%$, while the standard deviations are $40 \%$ and $65 \%$ respectively.
(i) Which asset will a rational investor buy? Support your answer with relevant calculations.
(4 marks)
(ii) If the correlation coefficient between the two assets is 0.9 what does this signify for diversification purposes?
(4 marks)

## Question 4

(a) Given below is information pertaining to asset X and Y .

|  | X | Y |
| :--- | :--- | :--- |
| Expected Return | $20 \%$ | $25 \%$ |
| Standard Deviation | $35 \%$ | $33 \%$ |
| Covariance |  | 0.04 |

(i)Calculate the Expected return on a portfolio which invests $60 \%$ in X and $40 \%$ in Y . (3 marks)
(ii) Calculate the risk of the portfolio in (i) above.
(4 marks)
(iii) Investigate the response of risk of portfolio in (i) when the correlation coefficient is 0.5 and it is reduced to -0.5 . Comment your findings.
(8 marks)
(iv) Find the Minimum Variance Portfolio made up of X and Y .
(5 marks)

## Question 5

With particular reference to the Zimbabwe Stock Exchange, discuss the Efficient Market Hypothesis.

## Question 6

'..........the objective of shareholder value maximization is always superior to the profit maximization objective............ Provide a discussion in support of this statement. (20)

End of paper.

