



**National University of
Science and Technology**
Think in Other Terms



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE
PART IV SUPPLEMENTARY EXAMINATIONS – AUGUST 2011
INSTITUTIONAL INVESTMENT ANALYSIS (CFI 4103)
TIME ALLOWED; 3 HOURS**

INSTRUCTIONS

Answer any **FOUR** questions

Start each question on a fresh page

Each question carries 25 marks.

Question 1

- (a) Explain how the following technical analysis strategies work
- (i) Contrarian views (5 marks)
 - (ii) Momentarian views (5 marks)
- (b) 'Technical analysis can only be used as an supplement to Fundamental analysis rather than being used independently to make investment decisions' Comment on this statement.
- (15 marks)

Question 2

- (a) With aid of a relevant example , explain how the level of cash balances of mutual funds can be useful information to an investor . (10 marks)

(b) You are given the following information about the JSE.

Day	Number of advancing stocks	number of declining stocks
1	2000	1400
2	1650	1800
3	1500	2100
4	1900	1700
5	2200	1400

Comment on the possible direction of the JSE with aid of relevant calculations. What action will a contrarian take? (10 marks)

(c) Company XYZ limited recently paid a dividend of 1000 cents. Dividends are expected to grow at rates of 4%, 6%, 9% and 9.5% in the next 4 years characterized by economic expansion. The rate of growth of dividends is expected to decline to 7% in year 5 and 6% in year 6. Thereafter dividends are not expected to grow. The required rate of return by shareholders is 25% in the first 4 years and increases to 30% in year 5 and year 6, thereafter it is estimated to remain constant at 28%. Estimate the current price of the share. (5 marks)

Question 3

(a) You are given the following information on four different financial assets.

Asset	Date Purchased	Purchase Price (\$)	Current Price (\$) (30 December 2010)
A	01-06-10	16.5	23.5
B	01-09-10	13	17
C	01-05-10	9	15
D	01-11-10	23	32

Your client needs advice on how to structure his portfolio which should be made up of any of the two assets. Based on information above advise your client. (10 marks)

(b) You are given the following information regarding prices for a sample of stocks.

Stock	Number of shares	Time t (price)	Time t+1 (price)
A	1,000,000	60	80
B	10,000,000	20	35
C	30,000,000	18	25

- (i) Construct a price weighted index for the three stocks and compute the percentage change in the index for the period from t to t+1. (4 marks)
- (ii) Construct a value weighted index for the three stocks and compute the percentage change in the index for the period from t to t+1. (5 marks)
- (c)** Identify and explain three major risks associated with investing in bonds. (6 marks)

Question 4

(a) You are the following information about asset A and B.

Asset	Expected Return	Standard Deviation
A	15%	20%
B	20%	28%

The risk free rate of return is 5% and the correlation coefficient is -0.5.

- (i) Estimate the Optimal portfolio made up of A and B. (4 marks)
- (ii) With aid of particular key assumptions, show that the efficient frontier will lie within a given region and will be concave. (7 marks)
- (iii) With aid of calculations, show that the correlation coefficient has more impact on overall portfolio risk than the weight of risky asset. (7 marks)
- (iv) What are speculative stocks? Under what circumstances may an investor find these stocks useful. (6 marks)

Question 5

(a)(i) Distinguish between operational and allocative efficiency. (3 marks)

(ii) Provide the limitations of Price to Earnings ratio and Price to Book value ratio as tools in valuation of equity securities (10 marks)

(b) State and explain four characteristics of a good financial market. (12 marks)

END OF PAPER