NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF FINANCE BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE PART IV – 2ND SEMESTER SUPPLEMENTARY EXAMINATION – AUGUST 2005 <u>INSTITUTIONAL INVESTMENT MANAGEMENT [CFI 4203]</u> TIME ALLOWED: 3 HOURS

INSTRUCTIONS

- 1. ATTEMPT ALL QUESTIONS.
- 2. EACH QUESTION CARRIES 20 MARKS.

QUESTION ONE

Discuss the objectives and constraints that the portfolio manager must consider when managing the portfolio of (a) an individual investor (b) institutional investors. [20 Marks]

QUESTION TWO

a. Describe the meaning of each of the following terms with respect to portfolio management:

- 1. Market timing.
- 2. Attribution analysis
- 3. Target date immunization.
- 4. Gap management.
- b. The following data relates to the performance of your portfolio relative to the market over a five-year period:

	MARKET (M)	PORTFOLIO (P)
Average return	40%	45%
Standard deviation	60%	65%
Beta coefficient	1.00	0.90

The risk-free rate during this period was 20% on average. Calculate the following measures of performance and comment on the performance of your portfolio:

- 1. Jensen measure.
- 2. Sharpe measure.
- 3. Treynor measure
- 4. Modigliani measure (M^2) , illustrate with a diagram
- 5. Bodie et al measure (T^2) , illustrate with a diagram

[20 Marks]

QUESTION THREE

- 1. Equity warrants are not as valuable as an otherwise identical call option on the equity of the same company. Explain why this must be the case. What is the incentive for a firm to issue warrants rather than issuing equity shares directly?
- 2. Bonds and preferred equity that are convertible into common equity are said to provide investors with both upside potential and downside protection. Explain how one security can possess both attributes. What implications do these features have on the way a convertible security is priced. [20 Marks]

QUESTION FOUR

- 1. Discuss any three strategies that active portfolio managers can use to add value to their portfolios.
- 2. Explain the 4 basic techniques that can be used to construct a passive index equity portfolio. [20 Marks]

QUESTION FIVE

CBZ is currently selling at \$23 per share. You gather the following one-point movements and three-point reversals:

DATE	PRICE	DATE	PRICE	DATE	PRICE
1 Jan	\$23.50	18 Jan	\$33.00	3 Feb	\$27.00
4 Jan	28.50	19 Jan	35.375	4 Feb	26.50
5 Jan	28.00	20 Jan	37.00	5 Feb	28.00
6 Jan	28.00	21 Jan	38.50	6 Feb	28.25
7 Jan	29.75	22 Jan	36.50	9 Feb	28.125
8 Jan	30.50	25 Jan	35.00	10 Feb	28.25
11 Jan	30.50	26 Jan	34.25	11 Feb	29.125
12 Jan	32.125	27 Jan	33.125	12 Feb	30.25
13 Jan	32.00	28 Jan	32.875	13 Feb	29.875

Calculate a 5-day moving average and identify any "buy or sell" signals from the data.