

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF COMMERCE**  
**DEPARTMENT OF FINANCE**  
**BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE**  
**PART IV – 2<sup>ND</sup> SEMESTER SUPPLEMENTARY EXAMINATION – AUGUST**  
**2006**  
**INSTITUTIONAL INVESTMENT MANAGEMENT [CFI 4203]**  
**TIME ALLOWED: 3 HOURS 10 MINUTES**

**INSTRUCTIONS**

1. **THIS PAPER IS 3 HOURS AND 10 MINUTES, OF WHICH 10 MINUTES IS READING TIME.**
2. **THIS PAPER CONTAINS SIX [6] QUESTIONS.**
3. **ATTEMPT ANY FIVE [5] QUESTIONS.**
4. **EACH QUESTION CARRIES 20 MARKS.**
5. **SHOW ALL YOUR WORKINGS.**

**QUESTION ONE**

- (a) Distinguish between top-down and bottom-up approaches to active equity portfolio management. Explain how each of the approaches can be accomplished. **[8 Marks]**
- (b) Identify and provide brief explanations of the various market timing approaches that are open to an investor. **[12 marks]**

**QUESTION TWO**

- (a) You are an investment advisor for an up-and-coming investment company. You are trying to come up with an optimal asset allocation for three clients whose degrees of risk tolerance are as follows:

Client A	-	0.0
Client B	-	1.5
Client C	-	3.0

In addition, the following information is available to you:

Expected return on shares	18%
Expected return on bonds	12%
Standard deviation of the return on shares	30%
Standard deviation of the return on bonds	20%
Correlation between the returns on shares and bonds	40%

- Determine the optimal share-bond mix for the investors. Comment on the significance of your results. **[10 marks]**
- (b) Discuss how an individual's investment strategy may change as he or she goes through the various phases of the investment life cycle. **[10 marks]**

### **QUESTION THREE**

- (a) Top-down adherents would argue that the biggest differences in portfolio performance come from differences in asset allocation than in individual stock selection. Why is this likely to be the case? **[5 marks]**
- (b) What is the difference between the time-weighted and the money-weighted rate of return on a portfolio. **[5 marks]**
- (c) Provide the Roll critique of performance measurement based on the Capital Asset Pricing Model and Security Market Line. **[6 marks]**
- (d) Nomsa Khumalo is an investment performance analyst for a major investment advisory firm. She has before her the following information about the performance of Megabucks Advisors for the past quarter.

Benchmark Return	=	8.5%
Timing Return	=	1.0%
Selection Return	=	<u>-1.5%</u>
Actual Return	=	<u>8.0%</u>

Market Return = 8%; Risk-free Rate = 3%

What were the actual and target betas of Megabuck Advisors during this quarter? **[4 marks]**

### **QUESTION FOUR**

- (a) Identify and briefly explain the various passive and active bond portfolio management strategies that are available to an investor. **[20 marks]**

### **QUESTION FIVE**

- (a) Explain how and why futures and options could be used in equity portfolio management. **[8 marks]**
- (b) You are the fund manager for a Zimbabwean life office that has a global orientation in its investment strategy. At your monthly strategy meeting your investment team decides that:
- ◆ Japanese growth will increase following a cut in Japanese interest rates.
  - ◆ S.A. growth will be boosted by a surge in productivity.

Suggest how this might affect your investment policy. **[6 marks]**

- (c) Outline four characteristics of real estate investment that set equity ownership of real estate apart from equity ownership of traded common stock. **[6 marks]**

### **QUESTION SIX**

Describe the steps followed in a typical investment process. **[20 marks]**