National University of Science and Technology
Think in Other Terms

FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE (HONOURS) FINANCE
PART IV 2nd SEMESTER FINAL EXAMINATION–MAY 2014
INSTITUTIONAL INVESTMENT MANAGEMENT [CFI 4203]

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** questions in Section A and any **THREE (3)** Questions from Section B
2. Write neatly and legibly.

INFORMATION TO CANDIDATES

1. This paper contains **FIVE (5)** Questions.
2. Section A is compulsory and it carries **40 marks.**
3. Choose **THREE (3)** Questions from Section B
4. Each question in Section B carries a total of **20 marks**
5. This paper contains **EIGHT (8)** printed pages.
6. The businesses and persons in this question paper are intended to be fictitious.

Compulsory Section A [40 Marks]: Each question carries two (2) marks.

I. Over a sample period, an investor gathers the following data about three mutual funds

Fund	Risk free rate	Return	Standard Deviation	Beta
P	5%	13%	18%	1.2%
Q	5%	15%	20%	1.4%
R	5%	18%	24%	1.8%

Based solely on the Sharpe measure, an investor would prefer mutual fund:

A. P
B. Q
C. R

II. Compared to an index of 100 U.S. exchange traded stocks, an index of 100 U.S. government and corporate bonds will most likely :

A. Reflect equally timely price data
B. Be more difficult to build and maintain
C. Have less turnover among the securities in the index

III. An industry in the growth phase of the industrial life cycle is most likely to experience:

A. Increasing prices
B. Increasing profitability
C. Intense competition among competitors

IV. Which of the following is an advantage of a callable bond (compared to an option free bond) to an investor?

A. Less reinvestment risk
B. Higher yield
C. More convexity

V. Janet Powers writes a covered call on a stock she owns, Billings, Inc. The current stock price of the stock is $45, and Powers writes the call at a strike price of $50.The call option premium is $3.50.Which of the following statement regarding Power's covered call strategy is most accurate?

A. Powers is trading the stock's upside potential in exchange for current income.
B. The price of the stock should rise to at least $48.50 before powers will lose money.
C. Powers is eliminating down side risk at the same time she is increasing her current income with the covered call strategy.

VI. Which of the following is least likely among the investment constraints that should be considered?

A. Legal and Regulatory factors
B. Unique needs and preferences
C. Adherence to the Standard of Practice

VII. Which type of risk is positively related to expected excess returns according to CAPM?

A. Unique
B. Systematic
C. Diversifiable

VIII. A company is most likely to earn economic profits if it is operating in an industry characterized by :

A. High industry concentration, high barriers to entry and low industry capacity
B. Low industry concentration, low barriers to entry and low industry capacity
C. Low industry concentration, high barriers to entry and high industry capacity

IX. Which form of efficient market hypothesis (EMH) implies that an investor can achieve positive abnormal returns on average by using technical analysis?

A. None.
B. Weak form.
C. Weak form and semi strong form.

X. If all factors remain unchanged, which of the following would most likely reduce a company's price/earnings ratio?

A. The dividend payout increases and the dividend growth rate increases.
B. The dividend growth rate increase and the required rate of return decrease.
C. The required rate if return increases and the dividend payout ratio decreases.

XI. If markets are semi strong form efficient, a portfolio manager is least likely to create value for investors by:

A. Monitoring clients' needs and circumstances.
B. Allocating invested funds among asset classes.
C. Analyzing financial statements to select undervalued stocks.

Question **XII** to **XVII** relate to James Stephenson Case below:

James Stephenson, aged 55 and single, is a surgeon who has accumulated a substantial investment portfolio without a clear long-term strategy in mind. Two of his patients who work in financial markets comment as follows:

James Hrdina: ‘‘My investment firm, based on its experience with investors, has standard investment policy statements in five categories. You would be better served to adopt one of these standard policy statements instead of spending time developing a policy based on your individual circumstances.’’

Charles Gionta: ‘‘Developing a long-term policy can be unwise given the fluctuations of the market. You want your investment adviser to react continuously to changing conditions and not be limited by a set policy”.

Stephenson hires a financial adviser, Caroline Coppa. At their initial meeting, Coppa compiles the following notes: Stephenson currently has a $2.0 million portfolio that has a large concentration in small-capitalization U.S. equities. Over the past five years, the portfolio has averaged 20 percent annual total return on investment. Stephenson hopes that, over the long term, his portfolio will continue to earn 20 percent annually. When asked about his risk tolerance, he described it as ‘‘average’’. He was surprised when informed that U.S. small-cap portfolios had experienced extremely high volatility. He does not expect to retire before the age of 70. His current income is more than sufficient to meet his expenses. Upon retirement, he plans to sell his surgical practice and use the proceeds to purchase an annuity to cover his postretirement cash flow needs. Both his income and realized capital gains are taxed at a 30 percent rate. No pertinent legal or regulatory issues apply. He has no pension or retirement plan but does have sufficient health insurance for post-retirement needs.

XII. The comments about investment policy statements made by Stephenson’s patients are best characterized as

Hrdina	Gionta
A. Correct	Correct
B. Correct	Incorrect
C. Incorrect	Incorrect

XIII. In formulating the return objective for Stephenson's investment policy statement, the most appropriate determining factor for Coppa to focus on is

A. Return desires

B. Ability to take risk

C. Return requirement

XIV. Stephenson's willingness and ability to accept risk can be best characterized as

Willingness to Accept Risk	Ability to Accept Risk
A. Below average	Below average
B. Below average	Above average
C. Above average	Above average

XV. Stephenson's tax and liquidity constraints can be best characterized as

Tax Constraint	Liquidity Constraint
A. Significant	Significant
B. Significant	Insignificant
C. Insignificant	Significant

XVI. Stephenson's time horizon is best characterized as

A. Short-term and single-stage

B. Short-term and multi-stage

D. Long-term and multi-stage

XVII. Stephenson's return objective and risk tolerance are most appropriately described as

Return Objective	Risk Tolerance
A. Below average	Below average
B. Below average	Above average
C. Above average	Above average

XVIII. In a case where a client's capacity to bear risk is significantly less than the client's expressed willingness to bear risk, the most appropriate action for a financial advisor is to

A. Counsel the client and attempt to change his attitude towards risk.

B. Base the assessment of risk tolerance in the Investment Policy Statement on client's ability to bear risk.

C. Attempt to educate the client about investment risk and correct any misconceptions.

XIX. A portfolio manager is constructing a new equity portfolio consisting of a large number of randomly chosen domestic stocks. As the number of stocks in the portfolio increases, what happens to the expected levels of systematic and unsystematic risk?

	Systematic	Unsystematic
A.	Increases	Remain the same
B.	Decreases	Increases
C.	Remains the same	Decreases

XX. Which of the following is the most likely effect of a liquidity squeeze on the price of stocks traded on the stock exchange?

A. Stock prices will be overvalued
B. Stock prices will be undervalued
C. Liquidity does not affect the valuation of stocks

SECTION B: CHOOSE ANY THREE QUESTIONS

QUESTION TWO

a) An investor has a portfolio with a market value of $50 000 000, when the FTSE 100 stands at 2850.The FTSE futures contract is based upon a unit of trading of $25 per index point and the six months futures contract on FTSE has a quoted price of 2920.Suppose that the FTSE then falls to 2600 and the portfolio value falls by 8.77%.Assuming the manager takes a short position in the futures market, what is the investor's profit or loss? **[3 marks]**

b) Superior investors should focus on mid-cap and small-cap stocks to generate above market returns. Justify the recommendation. **[3 marks]**

c) Consider the following information regarding the performance of a money manager in a recent month.

	Actual Return	Actual Weight	Benchmark Weight	Index Return
Equity	2.5%	.70	.60	2%
Bonds	1%	.20	.30	1.4%
Cash	0.7%	.10	.10	0.7%

i. What was the manager's return in the month? What was her over performance or underperformance? **[3; 2 marks]**

ii. What was the contribution of security selection to relative performance? **[2 marks]**

i. What was the contribution of asset allocation to relative performance? **[2 marks]**

d) In a highly volatile and uncertain economic environment, bottom-up approach to security analysis is arguably the best approach. Explain why this approach is deemed more appropriate under such conditions. **[3 marks]**

e) Explain why growth stocks are more risky than value stocks. **[2 marks]**

Total [20 marks]

QUESTION THREE

a) Analyse the potential investment constrains of a retired 70 year old investor. **[12 marks]**

b) Evaluate the inclusion of the monitoring and evaluation stage in portfolio management process **[5 marks]**

c) Examine the risk management view of asset allocation. **[3 marks]**

Total [20 marks]

QUESTION FOUR

a) If markets are efficient such that information is instantly and fully reflected in security prices according to the Efficient Market Hypothesis, then what is the rationale behind technical and fundamental analysis? **[3,3 marks]**

b) Assets A,B and C have the following expected returns and standard deviations

Assets	Expected Return	Standard Deviation
A	28	34
B	20	30
C	5	0

Given that the risk free rate is 5% and the investors risk's aversion coefficient is 4, rank these assets according to the investor's utility. **[3 marks]**

c) Discuss the importance of a Statement of Investment Policy in the investment management process. **[8 marks]**

d) "For any investments, it's key to understand the productivity of particular assets rather than analyzing whether the price of farmland or real estate in New York City now or in five years would go up. If you instead focus on the prospective price change of a contemplated purchase, you are speculating" (Warren Buffet, 2014).Evaluate this statement in relation to the selection of investment assets.

[3 marks]

Total [20 marks]

QUESTION FIVE

a) Differentiate between tactical and integrated asset allocation. **[4 marks]**

b) Explain credit analysis as an active bond management strategy. **[4 marks]**

c) A specialist equity fund invests in Zimbabwean industrial shares that are particularly sensitive to interest rates, economic growth and other factors that move the whole Zimbabwean equity market. This sensitivity is measured by the beta (β) of the portfolio, which is twice that of the Zimbabwe Stock Exchange industrial index. The fund wants to use ZSE index futures to protect the portfolio against the possibility of a rise in price of shares to be purchased with the forthcoming $3 000 000 cash flow.

What should the fund do if the current value of the ZSE industrial index is 3429 and the ZSE futures is priced at 3466 while the unit of trading for the ZSE futures is $25 per index? **[4 marks]**

d) Under what circumstances can an investor use a straddle strategy**?[3 marks]**

e) Identify the differences in focus when growth and value investors are using the price earnings ratio to make investment decisions. **[5 marks]**

Total [20 marks]

END OF EXAMINATION PAPER