



SII MASTERS JUNE 2009 EXAMINATION

FINANCIAL MARKETS

DATE OF EXAM	Wednesday 24 June 2009
3 HOURS	2.00 pm – 5.00 pm
RUBRIC	SECTION A – answer FOUR questions in this section SECTION B – answer BOTH questions in this section SECTION C – answer ALL parts of the question in this section

Candidates are reminded that no marks will be awarded for illegible work

NOTES TO CANDIDATES

1. Please insert your Candidate Number on the Answer Book cover. *Do not insert your name.*
2. Show *all* workings in your Answer Book.
3. Candidates may attempt the sections in any order. Please indicate clearly in your Answer Book which questions you are answering.
4. Please insert in the box provided on the cover of your Answer Book the numbers of the questions you have attempted in the order in which they appear in the Answer Book.
5. You may use the calculator provided or one approved by the Securities & Investment Institute.
6. You must hand your Answer Book to an invigilator before you leave the Examination Hall. *Failure to do so will result in disqualification.*
7. Once submitted, the examination scripts become the property of the Securities & Investment Institute and will not be returned to candidates.

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PLEASE TURN OVER WHEN INSTRUCTED

Answer ANY FOUR questions in this section. Each question carries 5 marks.

- 1 Discuss how the capital market line and the efficient frontier can be combined to produce the optimum portfolio for any investor. *(5 marks)*

- 2 European Economic & Monetary Union is the policy goal of many countries within the European Union. Discuss the various aspects of this policy. *(5 marks)*

- 3 Apparently very profitable companies can become bankrupt. Explain how the profit figure is affected by cashflow considerations. *(5 marks)*

- 4 Discuss how a split capital investment trust can be structured. *(5 marks)*

- 5 Explain five of the key features of a Real Estate Investment Trust. *(5 marks)*

- 6 Explain how R^2 is used to calculate the remaining systematic risk of a fund. *(5 marks)*

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PROCEED TO SECTION B OVERLEAF

Answer BOTH questions in this section

- 7 Bio Hazard Controls plc is a growing company which has had the following results for the past two years:

Profit & Loss Account for the year ended 31 December	2008	2007
	£000s	£000s
Turnover	3,573	2,320
Cost of sales	<u>2,036</u>	<u>1,206</u>
Gross profit	1,537	1,114
Marketing & distribution costs	679	394
Administration expenses	322	186
Other operating costs	<u>214</u>	<u>116</u>
Operating Profit	322	418
Interest Payable	<u>140</u>	<u>80</u>
Profit before tax	182	338
Tax	<u>49</u>	<u>91</u>
Profit for year	133	247
Dividends	<u>53</u>	<u>99</u>
Retained Profit	80	148
Balance Sheet as at 31 December	2008	2007
Fixed Assets		
Tangible Assets	1190	950
Current Assets		
Stocks	509	205
Debtors	607	290
Cash & bank	18	63
Current Liabilities		
Creditors (falling due within one year)	<u>852</u>	<u>437</u>
Net Current Assets	282	121
Total Assets less current liabilities	1,472	1,071
Non Current Liabilities		
Creditors (due after one year) Loans	<u>822</u>	<u>501</u>
Net Assets	<u>650</u>	<u>570</u>
<u>Capital & Reserves</u>		
Called up share capital (£1 each)	500	500
Profit & loss account	150	70
Equity Shareholders' Funds	<u>650</u>	<u>570</u>

- a) To be able to evaluate the company as a potential investment, you have been asked to calculate for both years the ratios which will permit you to comment on Bio Hazards':
- i) Profitability *(3 marks)*
 - ii) Liquidity *(3 marks)*
 - iii) Asset efficiency *(3 marks)*
 - iv) Gearing *(3 marks)*
- b) Using your calculations above, plus any other calculations you wish to make, comment on Bio Hazard Controls plc's overall prospects as an investment stock and recommend whether it should be given a rating of buy, hold or sell by a stock market analyst. *(8 mark)*

(Total 20 marks)

- 8 a) The UK Investment Manager of Thistle Investments has decided to move into bonds for her main portfolio. She therefore has asked you for some assistance. Two similar bonds (both from AAA rated companies) are available to her and she has asked you to say which provides better value on a purely financial basis. Both are deemed to be modest risk and Thistle has a required rate of return of 7% for both bonds, which have just made an interest payment.
- i) A 10-year bond paying 5% annually with a face value of £100 and costing £85 today which would be sold after 5 years. (The bond will be held for exactly 5 years then sold, it is anticipated that the required rate of return at the time of sale will be 8%) *(5 marks)*
 - ii) A 5-year bond paying 3% annually for the next two years, then 5% for the following two years and then 6% for the remaining year. It will pay £100 at maturity and is costing £85 today. *(5 marks)*
- b) They can also invest in a 4% index-linked bond (paid annually) which matures in exactly four years. The RPI at issue date (a few years ago) was deemed to be 100 and at last coupon payment (just paid) it was 125. For the next four years it is believed that the Government target rate for inflation of 3% pa will be achieved each year. Investors will therefore want a return of at least 6.5% pa. What is the maximum that they should pay? *(5 marks)*

- c) An alternative could be to purchase an annual coupon paying bond (par £100) paying 6% pa and costing £96 which matures in 4 years. Calculate if stripping the bond makes them more money than holding it till maturity. The bond would then be assessed as medium risk and this would mean a required return of 8% and the interest would be low risk and thus discounted at 6% (5 marks)

(Total 20 marks)

SECTION C

TOTAL 40 MARKS

Answer ALL parts of the question in this section.

- 9 Diamond Investments Fund Managers who run a sterling-based Unit Trust, called Diamond Growth Fund, believe that the value of shares in Broomfield Group SA will be subject to a degree of volatility over the next 4 months whilst a court case is ongoing relating to problems with their recent takeover of Albion plc. The share price has fallen to €1.20 but it could fall to €0.60 if they lose, or rise to €2.30 if they win. As the case progresses and evidence is heard the share price is likely to fluctuate quite dramatically. Diamond Investments want to be able to take advantage of the movements and thus profit irrespective of the outcome.

Once the case is settled, Diamond Investments will want to purchase approximately 2 million shares in Broomfield Group, as in the long term, they see the prospects for outstanding growth.

- a) Explain an option strategy which could be used to meet their requirements. (15 marks)
- b) Discuss how Warrants and CFDs could be used to try to achieve the same objective. (5 marks)
- c) As Diamond Investments are based in the UK, they also want to protect themselves against the depreciation of Sterling. To do this they are considering using a SWAP. Discuss how a SWAP can be used in this situation. (5 marks)
- d) At the end of the year the fund has the following statistics:

Opening value (on 1st January 2008) £1.20 per unit

Closing value (on 31st December 2008) £1.30 per unit

Portfolio beta was calculated to be 1.3

Standard Deviation of the fund was 8

The Risk Free rate was calculated to be 7.5%

The benchmark funds were deemed to have a return of 8.25%, Beta of 1.1 and a standard deviation of 9

Calculate for the fund and the benchmark:

i) The M2 ratio

ii) The Sharpe ratio

iii) The Treynor measure

iv) Prepare a short guide for the fund fact sheet which comments on the performance of the fund and the financial markets in which it was operating.

(15 marks)

(Total 40 marks)