PROFESSIONAL LEVEL EXAMINATION

WEDNESDAY 10 DECEMBER 2014

(2½ hours)

FINANCIAL MANAGEMENT

This paper consists of **THREE** questions (100 marks).

1. Ensure your candidate details are on the front of your answer booklet.
2. Answer each question in black ballpoint pen only.
3. Answers to each question must begin on a new page and must be clearly numbered. Use both sides of the paper in your answer booklet.
4. The examiner will take account of the way in which answers are presented.
5. When the assessment is declared closed, you must stop writing immediately. If you continue to write (even completing your candidate details on a continuation booklet), it will be classed as misconduct.

A Formula Sheet and Discount Tables are provided with this examination paper.

IMPORTANT

Question papers contain confidential information and must NOT be removed from the examination hall.

DO NOT TURN OVER UNTIL YOU ARE INSTRUCTED TO BEGIN WORK

You MUST enter your candidate number in this box.

1a. **You should assume that the current date is 30 November 2014**

Northern Risk Management Solutions (NRMS) is an authorised financial advisor and provides investment and risk management advice to a wide range of clients in Northern England. You are an ICAEW Chartered Accountant employed by NRMS with responsibility for providing risk management advice to two clients, Pared Ltd (Pared) and Spring Gardens Investments (SGI), and investment advice to the owners of Pared.

Pared is an agent for a Spanish wall tile manufacturer and sells tiles to customers in the UK and the Republic of Ireland. In the past Pared has hedged the foreign exchange rate risk on its foreign currency transactions using the money markets (money market hedges). Pared's bank has suggested that it would be better for the company to use either forward contracts or over the counter (OTC) currency options. The owners of Pared are now unsure as to how they should be hedging their currency risk. You have been asked to make a comparison of the results of hedging using the three different techniques.

Pared has the following euro receipts and payments due in three months' time.

Receipts due from Irish customers on 28 February 2015	€3.4m
Payments due to the Spanish supplier on 28 February 2015	€2.1m

The following data is available to you at the close of business on 30 November 2014:

Spot exchange rate (€/£)	1.2184 - 1.2188
Three-month forward contract premium (€/£)	0.0013 - 0.0012

Three-month OTC currency option to buy £ with €:
Exercise price €/£ 1.2180, premium of £0.02 per euro to be converted payable on 30 November 2014.

Annual borrowing and depositing interest rates are:

Euro	3.60% - 2.80%
Sterling	4.40% - 3.40%

Requirements

(i) Assuming that the spot exchange rate on 28 February 2015 will be €/£ 1.2179 - 1.2182, calculate Pared's net sterling receipt if it uses the following to hedge its foreign exchange rate risk:

- a money market hedge
- a forward contract
- an OTC currency option **(11 marks)**

(ii) Discuss the relative advantages and disadvantages of each technique and advise Pared's owners on which would be the most beneficial for hedging its foreign exchange rate risk. **(9 marks)**

1b. One of the supervisors at SGI manages a portfolio of FTSE100 shares. The portfolio is valued at £100m on 30 November 2014 and the supervisor is convinced that the markets will fall significantly over the next month to 31 December 2014. He wishes to protect the portfolio against this potential fall in value.

FTSE100 one-month index futures are currently trading at 6,700. Each contract is for a notional value of the futures price multiplied by £10.

Requirements

(i) Demonstrate the result of hedging using index futures over the next month assuming that, on 31 December 2014, the portfolio value is £95m and the index futures price will be 6,365. **(3 marks)**

(ii) Identify the disadvantages of a futures hedge and why in practice the hedge may not be totally efficient. **(4 marks)**

1c. You have a meeting scheduled for 1 December 2014 with Yolanda Luz, one of the owners of Pared. She holds some shares in a listed company, Sunshine Holidays plc, and she has asked your advice on whether she should hold or sell them.

During your conversations with the supervisor at SGI he had mentioned to you that he had very reliable information that there is likely to be a takeover of Sunshine Holidays plc.

Requirement

Identify and explain any ethical issues arising for you in advising Yolanda on whether to hold or sell her shares in Sunshine Holidays plc. **(3 marks)**

Total: 30 marks

2. **You should assume that the current date is 31 December 2014**

Rossendale Hotels plc (Rossendale) operates a chain of city centre and country hotels in the UK. Rossendale set up a division, Inside&Out, which carries out the maintenance, cleaning and gardening at all its own hotels and the hotels of some other companies in the industry.

At a recent meeting the board of Rossendale were discussing a possible restructuring of the company by divesting of Inside&Out. However, the board is not certain about the best way to achieve the divestment in order to maximise the wealth of Rossendale's shareholders. The Chief Executive (CE) feels that a demerger would be the most appropriate method, but also feels that the existing management team of Inside&Out should be given the opportunity to buy the division. One of the other board members feels that a sell-off to a third party would be most beneficial for Rossendale's shareholders. At the meeting the CE stated that the first thing to do is to put a value, at 31 December 2014, on Inside&Out. He has now asked Rossendale's finance director to value the division and prepare notes regarding how and why the restructuring should be undertaken before a final decision is made.

Rossendale's finance director intends to value the division using net present value at 31 December 2014. However, one difficulty that he has is that sales are hard to predict. After analysing data for the past ten years he has estimated that sales (in 31 December 2015 prices) and associated probabilities for the year ended 31 December 2015 will be:

Sales £m	**Probability**
25	40%
105	20%
130	40%

Sales in the following three years would remain at the first year's expected level, adjusted for volume and price changes.

Additional cost and revenue information:

- After 31 December 2015, sales volume growth is expected to be 10% pa for three years and sales prices are expected to rise by 5% pa. Contribution is 15% of sales.

- Incremental fixed costs will be £5m for the year ended 31 December 2015 and will increase subsequently by the general level of inflation.

- Currently the vehicles and equipment of Inside&Out are leased. It is now the intention to buy new vehicles and equipment. Investment in new vehicles and equipment on 31 December 2014 will be £10m. The vehicles and equipment will have a value of £2m on 31 December 2018 (in 31 December 2018 prices). The vehicles and equipment will attract 18% (reducing balance) capital allowances in the year of expenditure and in every subsequent year of ownership by the company, except the final year. In the final year, the difference between the plant and machinery's written down value for tax purposes and its disposal proceeds will be treated by the company either:

  (i) as an additional tax relief, if the disposal proceeds are less than the tax written down value, or

  (ii) as a balancing charge, if the disposal proceeds are more than the tax written down value.

- Assume that the rate of corporation tax will be 21% pa for the foreseeable future and that tax flows arise in the same year as the cash flows which gave rise to them.

- An appropriate real weighted average cost of capital for the division is 7% pa and the general level of inflation is expected to be 3% pa.

- On 31 December 2014 Inside&Out requires an additional investment of £5m in working capital, which will increase at the start of each year in line with sales volume growth and sales price increases. Working capital will be fully recoverable on 31 December 2018.

- The finance director intends to include in the valuation of the division a continuing value at the end of four years that will represent the value of the net cash flows beyond the fourth year after tax. This will be calculated as a multiple of 10 times the after tax operating cash flows for the year ended 31 December 2018.

- Unless otherwise stated you should assume that all cash flows arise at the end of the year to which they relate.

Requirements

(a) Calculate, using money cash flows, the expected net present value of Inside&Out on 31 December 2014. **(16 marks)**

(b) **Ignoring the effects on working capital**, calculate the sensitivity of the valuation of Inside&Out to changes in sales revenue and discuss this sensitivity with reference to the sales and associated probability estimates provided by the finance director. **(5 marks)**

(c) Outline another valuation method that would be appropriate for placing a value on Inside&Out. **(3 marks)**

(d) Explain and justify the possible reasons for the divestment of Inside&Out from Rossendale. **(5 marks)**

(e) Discuss the advantages and disadvantages of Rossendale divesting itself of Inside&Out by:

(i) A demerger (also known as a spin-off) into two listed companies
(ii) A sell-off
(iii) A management buyout (MBO) **(6 marks)**

Total: 35 marks

3. **You should assume that the current date is 30 November 2014**

Wiggins plc (Wiggins) provides engineering and production support to the power generation industry. Wiggins is planning its capital expenditure programme and, on 1 December 2014, intends to raise £200m to invest in projects during 2015. Some of these projects will be in a different industry sector to current operations. The board is discussing how the additional £200m should be raised.

The finance director of Wiggins has presented the board with two alternative sources of finance as follows:

Debt issue – the £200m would be raised by an issue of 3% coupon debentures, redeemable at par on 1 December 2024. The bond markets would currently expect a gross redemption yield for such an issue of 5% pa.

Equity issue – the £200m would be raised by a 1 for 8 rights issue, priced at a discount on the current market value of Wiggins's ordinary shares.

The board has expressed a number of concerns regarding the raising of the £200m and the hurdle rate that should be used to appraise the projects in which the funds will be invested. The sales director is concerned that the hurdle rate will increase and that some of the new projects may be unviable and will be rejected. The Chief Executive has read that, whatever the hurdle rate, the Capital Asset Pricing Model (CAPM) has severe weaknesses and that other models should be used to calculate the company's cost of equity. The production director is concerned about the issue price of the debentures and, if a rights issue is used, whether the rights will be fully subscribed.

An extract from Wiggins' most recent management accounts is shown below:

Income statement for the year ended 30 November 2014

	£m
Operating profit	239
Interest on debentures	12
Profit before tax	227
Taxation	48
Profit after tax	179

Wiggins' financial structure at 30 November 2014

£300m 4% debentures, redeemable at par on 30 November 2018, with a current market value of £108 cum-interest per £100 nominal debenture.

360m ordinary shares with a current ex-dividend market value of £5.60 per share.

Additional information:

- Wiggins has an equity beta of 1.20
- The risk free rate is 2.0% pa
- An appropriate market risk premium is 5% pa
- The corporation tax rate can assumed to be 21% pa for the foreseeable future
- The power generation industry average interest cover is 11 and average gearing (debt/equity by market values) is 30%.

Requirements

(a) **Ignoring the new finance and investments**, calculate (using the CAPM) Wiggins' weighted average cost of capital on 30 November 2014. **(6 marks)**

(b) Assuming debt is issued on 1 December 2014, calculate the issue price and the total **nominal** value of new debt that will have to be issued to give a gross redemption yield of 5% pa and discuss the reasons why this yield is different to the yield on Wiggins' existing debentures. **(5 marks)**

(c) Assuming a 1 for 8 rights issue is made on 1 December 2014:

(i) calculate both the discount the rights price represents on Wiggins' current share price and the theoretical ex-rights price
(ii) discuss whether the actual share price is likely to be equal to the theoretical ex-rights price. **(5 marks)**

(d) Outline the advantages and disadvantages of the two alternative sources for raising the £200m and, using the industry average interest cover and gearing information, advise Wiggins' board on which source should be used. **(10 marks)**

(e) Discuss whether the hurdle rate to appraise the planned new investments should be either:

(i) the weighted average cost of capital figure calculated in (a) above; or
(ii) the individual cost of whichever new source of funding (i.e. equity or debt) is selected. **(5 marks)**

(f) Explain how multiple factor models might overcome the weaknesses of the CAPM. **(4 marks)**

Total: 35 marks