PROFESSIONAL LEVEL EXAMINATION

TUESDAY 8 MARCH 2016

(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. You will be given time to sign, date and print your name on the answer booklet, and to enter your candidate number on this question paper. You may not write anything else until the exam starts.

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 Formulae 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.

1. Aranheuston Pharma plc (AP) is a large listed UK pharmaceuticals company and its financial year end is 31 March. Its directors have decided to invest in new products on a regular basis in order to keep pace with the global trading environment. In order to help grow the company more quickly, AP's directors are also investigating the possible takeover of a competitor.

Considerable development time is required for the production of new pharmaceutical products and so net cash inflows from sales often lag well behind the development costs required.

Forecast life-cycle data for a new product (AP525) that is under consideration are provided below:

	Year to 31/3/16 £'000	**Year to 31/3/17 £'000**	**Year to 31/3/18 £'000**	**Year to 31/3/19 £'000**
Depreciation (note 1)	(350)	(350)	(350)	-
Rent (note 2)	-	(80)	(80)	(80)
Fixed costs (notes 3 & 5)	-	(290)	(290)	(290)
Interest (note 4)	-	(60)	(60)	(60)
Sales (note 5)	-	0	2,600	700
Variable costs (note 5)	-	0	(1,180)	(220)
Profit/(loss)	(350)	(780)	640	50
Total working capital required (note 5)	0	260	70	0

Note 1
New equipment required for the production of AP525 will cost £1,150,000 on 31 March 2016 and will be sold on 31 March 2019 for an agreed price of £100,000 (in 31 March 2019 prices).

AP depreciates its equipment on a straight-line basis. A full year's depreciation is charged in the year of purchase and none in the year of sale.

If this new equipment is purchased, existing equipment, which originally cost £120,000 many years ago and has a tax written down value of zero, will be sold on 31 March 2016 for £70,000.

The new 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 equipment's written down value for tax purposes and its disposal proceeds will be treated by the company either as a:

- balancing allowance, if the disposal proceeds are less than the tax written down value, or
- balancing charge, if the disposal proceeds are more than the tax written down value.

Note 2
The new equipment will take up extra space, which will have to be rented for three years. The rent would be at a fixed annual amount of £80,000, payable in advance, with the first payment due on 31 March 2016.

Note 3
£130,000 of these fixed costs per annum are existing head office costs that will be allocated to the project.

Note 4
The purchase of the new equipment would be funded from an issue of debt and this represents the interest cost on that debt.

Note 5
Unless otherwise stated, all of the above figures are in 31 March 2016 prices. The following inflation rates are expected for the years ended 31 March 2017-2019:

- Sales: 2% pa
- Variable and fixed costs and working capital: 3% pa

Other information

Corporation tax will be payable at the rate of 21% pa for the foreseeable future and tax will be payable in the same year as the cash flows to which it relates.

Unless indicated otherwise, assume that all cash flows occur at the end of the relevant year.

An appropriate money cost of capital for the project is 8% pa.

Requirements:

1.1 Using money cash flows, calculate the net present value of the AP525 product at 31 March 2016 and advise AP's directors whether the company should proceed with it. **(18 marks)**

1.2 Calculate the sensitivity of your advice in part 1.1 to changes in the variable costs of the AP525 product and comment on your result. **(5 marks)**

1.3 For the purposes of the possible takeover of a competitor, outline the Shareholder Value Analysis (SVA) approach to company valuation for AP's directors, identifying its advantages and disadvantages. **(6 marks)**

1.4 Agency theory highlights the potential conflicts that may occur between a company's shareholders and its directors.

(a) Explain how these conflicts might arise in AP in relation to the potential takeover of a competitor.

(b) Assuming that the AP525 product goes ahead, explain how these conflicts might arise in AP in relation to:

- debt levels
- short-term versus long-term performance appraisal. **(6 marks)**

Total: 35 marks

2. **You should assume that the current date is 1 March 2016**

Oliphant Williams plc (OW) is a large UK design company that has traded since 1994. Its capital structure at 29 February 2016 is shown below:

	Par Value	**Market Value**	**Total market value**
	£m	**(ex-div / ex-int)**	**£m**
Ordinary share capital	96	£1.70/share	326.4
Preference share capital	28	£1.80/share	50.4
3.5% debentures (redeemable at par in 2019)	160	£105%	168.0

Note 1: OW's retained earnings at 29 February 2016 were £43.8 million.

Note 2: OW's earnings for the year to 29 February 2016 were £21.12 million. Earnings are not expected to change significantly in the next two years.

Note 3: OW's ordinary dividend for the year to 29 February 2016 was £0.09 per share.

You are an ICAEW Chartered Accountant and the managing director of OW. The following comments were made at OW's most recent board meeting:

Finance director
"The company's level of debt is too high and its balance sheet needs restructuring. Why don't we raise more equity and pay off some of the debt? This would reduce gearing and have a positive impact on the price of ordinary shares. A reasonably priced rights issue is probably the best way forward and should not dilute OW's earnings per share excessively."

Marketing director
"Our dividend is similar, in terms of the payout ratio, to previous years, but I think that this policy of paying high dividends is an unnecessary drain on our resources. I think that our shareholders would react positively if we reduce the dividend in future."

Production director
"Whilst we don't expect our earnings to change much in the next two years, surely it would be better for our share price if we predict some growth when we communicate with our shareholders?"

In response to the finance director's concerns, OW's board is considering the redemption of one half of its debentures. The debentures would be redeemed at an agreed price of £110.40%. The redemption would be funded by a 2 for 5 rights issue.

Assume that the corporation tax rate will be 21% pa for the foreseeable future.

Requirements

2.1 Calculate OW's gearing ratio (debt / debt + equity) at 29 February 2016, using both book and market values. **(3 marks)**

2.2 Discuss, with reference to relevant theories and your calculations in 2.1 above, the finance director's view that a reduction in OW's gearing would have a positive impact on the company's share price. **(6 marks)**

2.3 Assuming that the debenture redemption and rights issue goes ahead on 1 March 2016 as outlined above, calculate the theoretical ex-rights price of one OW ordinary share. Show the financial impact of the proposed rights issue on an OW shareholder who owns 10,000 ordinary shares and who

(a) takes up all of the rights
(b) sells all of the rights
(c) does nothing. **(9 marks)**

2.4 Calculate, and comment upon, the actual price of an ordinary OW share after the rights issue is made, assuming that OW's current P/E (price/earnings) ratio remains unchanged. **(7 marks)**

2.5 Making reference to relevant theories, discuss whether the marketing director is correct that a reduction in OW's ordinary dividend would affect the price of its ordinary shares. **(7 marks)**

2.6 Comment on the ethical implications of the production director's suggestion for you as an ICAEW Chartered Accountant. **(3 marks)**

Total: 35 marks

3.1 **You should assume that the current date is 29 February 2016**

Tully Carlisle Ltd (TC) is a UK construction firm. Most of its suppliers are UK-based. However, since 2014 it has been purchasing steel girders from a Russian company, GSL.

At a recent board meeting one of TC's directors commented:

"With our GSL purchases, we've never hedged against adverse exchange rate movements. I think that we should as we're now buying a lot of steel from GSL. The orders are made three months ahead of delivery and payment. A lot could happen to the exchange rate in those three months."

TC's next order from GSL, at a price of R145.6 million (R = roubles, the Russian currency) will be paid for in three months' time on 31 May 2016. You are a member of TC's finance team and have been asked to advise the board of the implications of hedging this purchase. You have collected the following information:

Spot exchange rate at 31 December 2014 (R/£)	79.45 – 91.34
Spot exchange rate at 31 December 2015 (R/£)	76.51 – 87.95
Spot exchange rate at 29 February 2016 (R/£)	78.81 – 90.62
Three-month forward contract discount (R/£)	0.55 – 0.63
Forward contract arrangement fee (per one million roubles converted)	£40
Three-month over the counter (OTC) put option on roubles, exercise price (R/£)	91.83
Three-month OTC call option on roubles, exercise price (R/£)	79.85
Relevant OTC option premium (per one million roubles converted)	£90
Sterling interest rate (borrowing)	3.6% pa
Rouble interest rate (borrowing)	6.6% pa
Sterling interest rate (lending)	2.9% pa
Rouble interest rate (lending)	5.6% pa

Requirements

(a) Calculate the sterling cost of TC's payment to GSL on 31 May 2016 if it uses the following to hedge its exchange rate risk:

- a forward contract
- a money market hedge
- an OTC currency option **(8 marks)**

(b) With reference to your calculations in (a) above and the spot exchange rates provided, advise TC's board whether to hedge the payment to GSL. **(9 marks)**

(c) Explain, with relevant workings, why the three-month forward rate is expressed at a discount to the spot rate on 29 February 2016. **(5 marks)**

3.2 TC borrowed £18.5 million last year at a fixed rate of 5.2% pa and this loan is repayable in March 2019. Anticipating a fall in interest rates, TC's board has asked its finance team to investigate the possibility of arranging an interest rate swap. TC's bank has offered the company a variable rate loan at LIBOR plus 1.2% pa.

Saunders Southgate Media (SSM), a company with a similar sized loan to TC (at a variable rate of LIBOR plus 1.6% pa), is keen to swap its loan for one at a fixed rate. SSM has been offered a fixed rate of 6.4% pa by its bank. LIBOR is currently 3.5% pa.

Requirement

Prepare workings for TC's board that show how an interest rate swap that is equally beneficial to both companies could be set up. The variable leg of the swap should be set at LIBOR. Your workings should include a calculation of the total annual interest payable by each company once the swap has been made. **(8 marks)**

Total: 30 marks