PROFESSIONAL LEVEL EXAMINATION

TUESDAY 12 SEPTEMBER 2017

(2½ HOURS)

FINANCIAL MANAGEMENT

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

1. Please read the instructions on this page carefully before you begin your exam. If you have any questions, raise your hand and speak with the invigilator before you begin. The invigilator cannot advise you on how to use the software.

2. Click on the **Start Exam** button to begin the exam. The exam timer will begin to count down. A warning is given five minutes before the exam ends. When the exam timer reaches zero, the exam will end. To end the exam early, press the **Finish** button.

3. You may use a pen and paper for draft workings. Any information you write on paper will not be read or marked.

4. The examiner will take account of the way in which answers are structured. Do not write anything which is not in direct response to the examination questions.

5. Ensure that all of your responses are visible on screen and are not hidden within cells. Your answers will be presented to the examiner as they appear on screen.

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

1. Merikan Media plc (Merikan) is a large listed media group based in the UK. It currently owns a controlling interest in 35 companies worldwide. Merikan's board is considering altering its UK investment portfolio via:

(1) the purchase of all of the shares in a commercial radio company and
(2) the disposal of all of its shares in a newspaper company.

You work in Merikan's finance team and have been asked to prepare valuations and supporting notes for the board. Details of the two proposed transactions are shown below.

1.1 **Purchase of all of the shares in a commercial radio company**

Coastal Radio Ltd (Coastal) was formed in 2003 and has been a very successful radio station. Its listener numbers have increased steadily, as have advertising revenue and annual profits. Extracts from Coastal's most recent management accounts (together with supporting notes) are shown here:

Income Statement
for the year ended 31 August 2017

	£'000
Sales	28,400
Operating costs	(15,600)
Depreciation	(3,500)
Amortisation	(1,200)
Profit before interest	8,100
Debenture interest	(400)
Profit before tax	7,700
Taxation (at 17%)	(1,309)
Profit after taxation	6,391
Dividends paid	(1,750)
Retained profit	4,641

Balance Sheet
at 31 August 2017

	£'000
Non-current assets	36,310
Current assets	4,316
	40,626
£1 ordinary shares	3,500
Retained earnings	27,206
5% debentures	8,000
Current liabilities	1,920
	40,626

Notes:

1. Coastal's non-current assets originally cost £52.8 million. They were valued at £37.8 million on 31 August 2017 and its current assets were valued at £4.2 million on the same date. Neither of these valuations is reflected in the balance sheet at 31 August 2017.

2. Coastal's debentures were trading at £110% on 31 August 2017.

3. Average figures for listed UK commercial radio companies:

P/E ratio	8.5
Dividend yield	5%
Enterprise value multiple	6.5

Requirements

(a) Calculate the value of one Coastal share based on each of the following methods:

- Price earnings ratio
- Dividend yield
- Enterprise value
- Net assets basis (historic cost)
- Net assets basis (revalued) **(12 marks)**

(b) Justify and advise the board of the price range within which it should make an offer for Coastal's shares. Refer to your calculations in part (a) above. **(8 marks)**

1.2 **Disposal of all of its shares in a newspaper company**

Merikan has owned all of the share capital of Albion Newspaper Group Ltd (Albion) since 2005. Recently Albion's directors have informed Merikan's board that they are willing to make a management buy-out (MBO) of Albion. Accordingly, Merikan's board wishes to value Albion using the shareholder value analysis method (SVA). Merikan's board estimates that Albion has a three-year competitive advantage over its competitors (to 31 August 2020) and the following data regarding Albion's value drivers and additional financial information has been collected:

Sales for the current year (to 31 August 2017)	£70.0 million
Annual depreciation (equal to annual replacement non-current asset expenditure)	£1.5 million
Par value of 6% debentures in issue (current market value £95%)	£10.0 million
Short-term investments held	£0.7 million
Corporation tax rate	17%
Current WACC	8%

Year to 31 August (budgeted)	**2018**	**2019**	**2020**	**Beyond 2020**
Sales growth	5%	3%	2%	0%
Operating profit margin	8%	9%	9%	9%
Incremental non-current asset investment (as a % of sales increase)	6%	5%	2%	0%
Incremental working capital investment (as a % of sales increase)	5%	5%	4%	0%

Requirements

(a) Calculate the value of Albion's equity using SVA. **(12 marks)**

(b) Outline the methods by which Albion's directors might raise the funds necessary for the proposed MBO of the company. **(3 marks)**

Total: 35 marks

2. **You should assume that the current date is 31 August 2017**

Ramsey Douglas Motors plc (Ramsey) is a UK-listed, UK-based motor car manufacturer which was formed in 1984. Ramsey's financial year end is 31 August.

Details of Ramsey's long term-finance at 31 August 2017 and its total dividend and interest payments for the year to 31 August 2017 are shown in the table below:

Table

	Market value at 31/8/17	**Nominal value at 31/8/17**	**Dividends paid in year to 31/8/17**	**Interest paid in year to 31/8/17**
	£'000	**£'000**	**£'000**	**£'000**
£1 ordinary shares (note 1)	65,600	32,000	5,440	
£0.50 preference shares	10,800	2,000	640	
£100 irredeemable debentures	6,000	5,000		275
£100 redeemable debentures (note 2)	4,200	4,000		240

Notes:

1. Ordinary share dividends have been growing at 3% pa for the past four years.
2. The redeemable debentures are redeemable at par on 31 August 2020.
3. All dividends and interest for the year to 31 August 2017 have been paid in full.

You are Ramsey's finance director and an ICAEW Chartered Accountant. At its 22 August 2017 meeting, the board considered two proposed new investments. You were asked to prepare workings and recommendations in advance of the next meeting regarding those two investments, details of which are shown below:

Investment 1
Ramsey wishes to invest £9.5 million in a new computerised manufacturing system, making use of robotic techniques. Half of this investment would be funded from Ramsey's retained earnings and the balance via a bank loan at an agreed rate of 7.5% pa. A report was presented by the production director at the 22 August board meeting. It concluded that this new system would generate efficiencies that would increase manufacturing profit by 6-8% pa. At the same meeting, one of Ramsey's other directors, Michael Bateman, said that "because the company should be striving for a higher share price, any press releases regarding the new system should state that profits are expected to increase by at least 15% pa."

Investment 2
Ramsey's board is considering a major change in strategy by investing in the development of driverless cars. A driverless car is a vehicle that is capable of sensing its environment and navigating without human input. The finance for this investment would be raised in such a way so as not to alter Ramsey's current gearing ratio (measured as debt:equity by market values). The debt element of the finance will come from a new issue of 9% irredeemable debentures at par.

Ramsey's directors want to establish a cost of capital that could be used to appraise the investment in driverless cars. They are aware that such a diversification would be very risky and is likely to increase Ramsey's equity beta which is currently 1.25.

The following data, collected at 31 August 2017, should be used when preparing your workings for the next board meeting:

Driverless cars industry sector	
Equity beta	2.10
Ratio of long-term funds (debt:equity) by market values	16:72
Expected risk free rate	2.25% pa
Expected return on the market	9.15% pa

The board also discussed the possible negative impact of this risky investment on Ramsey's share price. One director, Laura Young, commented "It's okay. Markets are efficient. Even if it does fall, the share price will soon adjust to its normal level."

Other information

You should assume that corporation tax will be payable at the rate of 17% for the foreseeable future and tax will be payable in the same year as the cash flows to which it relates.

Requirements

2.1 Using the information in the table, calculate Ramsey's WACC at 31 August 2017. **(10 marks)**

2.2 Calculate, and briefly comment upon, the impact on the market value of Ramsey's redeemable debentures of a rise in their gross redemption yield to 5% pa. **(3 marks)**

2.3 Advise, with reasons, whether Ramsey should use the WACC figure calculated in part 2.1 above when appraising Investment 1. **(5 marks)**

2.4 Explain the ethical implications for you, as an ICAEW Chartered Accountant, arising from Michael Bateman's suggestion regarding the press releases for Investment 1. **(3 marks)**

2.5 Calculate an appropriate WACC that Ramsey could use when appraising Investment 2 and explain the reasoning behind your approach. **(10 marks)**

2.6 Evaluate briefly Laura Young's comments regarding Investment 2's effect on Ramsey's share price. **(4 marks)**

Total: 35 marks

3. **You should assume that the current date is 31 August 2017**

Jenson Grosvenor plc (Jenson) is a UK-based manufacturer of industrial pumps. The majority of the raw materials and component parts used in the manufacture of Jenson's pumps are imported from EU countries and are invoiced in euros.

You work in Jenson's finance team and have been asked to provide guidance on two issues to be discussed at the next board meeting.

Issue 1 – AZS Oil contract

Jenson's directors recently signed a contract with a Canadian oil company, AZS Oil (AZS). This contract is for the supply of a large consignment of specialised oil pumps for use by AZS at its oilfields in northern Canada. The contract is valued at 5.2 million Canadian dollars (C$). The pumps will be dispatched on 31 October 2017 and Jenson will receive the C$5.2 million from AZS on 30 November 2017.

You have been given the following information at the close of business on 31 August 2017:

Spot rate (C$/£)	1.6305 – 1.6385
Three-month forward contract discount (C$/£)	0.0045 – 0.0085
Arrangement fee for forward contract	£0.35 per C$100 converted
Canadian dollar interest rate (lending)	4.4% pa
Sterling interest rate (lending)	2.8% pa
Canadian dollar interest rate (borrowing)	5.2% pa
Sterling interest rate (borrowing)	3.6% pa
Three-month OTC call option on C$ – exercise price	1.6090/£
Three-month OTC put option on C$ – exercise price	1.6245/£
Cost of relevant OTC option	£0.75 per C$100 converted

In relation to the AZS contract, you are aware that at the next board meeting Jenson's directors will discuss (a) the implications of an increase in the value of sterling and (b) the foreign exchange hedging techniques that Jenson might employ.

Issue 2 – Shareholding in Callella plc

Jenson owns 50,000 shares in Callella plc (Callella). The company has never used any hedging techniques to protect it from a fall in the value of this investment and the board now wishes to remedy that. As a first step, the directors will consider how traded options work at the next board meeting.

The market price of one Callella share at 31 August 2017 is 365p. Traded options on Callella shares at the same date are available as follows (all figures are in pence):

	Calls		Puts	
Exercise price	**September**	**October**	**September**	**October**
355	11.0	21.0	2.0	13.5
370	3.5	14.0	9.0	20.5

Requirements

3.1 **For Issue 1,** calculate Jenson's sterling receipt from the AZS contract if it:

(a) uses an OTC currency option

(b) uses a forward contract

(c) uses a money market hedge

(d) does not hedge the Canadian dollar receipt and sterling strengthens by 5% by 30 November 2017 **(9 marks)**

3.2 With reference to your calculations in part 3.1, advise Jenson's board whether or not it should hedge its Canadian dollar receipt from the AZS contract. **(7 marks)**

3.3 Explain why Jenson's imports and exports might expose the company to economic risk. **(3 marks)**

3.4 Explain the advantages and disadvantages of using currency futures rather than a forward contract to manage foreign exchange risk. **(4 marks)**

3.5 **For Issue 2,** calculate the intrinsic value and the time value of each of the options on Callella's shares at 31 August 2017. **(4 marks)**

3.6 **For Issue 2,** explain briefly the three factors that affect the time value of the options on Callella's shares. **(3 marks)**

Total: 30 marks