

Fundamentals Level – Skills Module

Financial Management

Friday 9 September 2016



Time allowed: 3 hours 15 minutes

This question paper is divided into three sections:

Section A – ALL 15 questions are compulsory and **MUST** be attempted

Section B – ALL 15 questions are compulsory and **MUST** be attempted

Section C – BOTH questions are compulsory and **MUST** be attempted

Formulae Sheet, Present Value and Annuity Tables are on pages 13–15.

Do NOT open this question paper until instructed by the supervisor.

Do NOT record any of your answers on the question paper.

This question paper must not be removed from the examination hall.

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Think Ahead

ACCA

The Association of
Chartered Certified
Accountants

Section A – ALL 15 questions are compulsory and MUST be attempted

Please use the grid provided on page two of the Candidate Answer Booklet to record your answers to each multiple choice question. Do not write out the answers to the MCQs on the lined pages of the answer booklet.

Each question is worth 2 marks.

- 1 The owners of a private company wish to dispose of their entire investment in the company. The company has an issued share capital of \$1m of \$0.50 nominal value ordinary shares. The owners have made the following valuations of the company's assets and liabilities.

Non-current assets (book value)	\$30m
Current assets	\$18m
Non-current liabilities	\$12m
Current liabilities	\$10m

The net realisable value of the non-current assets exceeds their book value by \$4m. The current assets include \$2m of accounts receivable which are thought to be irrecoverable.

What is the minimum price per share which the owners should accept for the company?

- A \$14
- B \$25
- C \$28
- D \$13

- 2 **Which of the following financial instruments will NOT be traded on a money market?**

- A Commercial paper
- B Convertible loan notes
- C Treasury bills
- D Certificates of deposit

- 3 Andrew Co is a large listed company financed by both equity and debt.

In which of the following areas of financial management will the impact of working capital management be smallest?

- A Liquidity management
- B Interest rate management
- C Management of relationship with the bank
- D Dividend policy

- 4 **Which of the following are descriptions of basis risk?**

- (1) It is the difference between the spot exchange rate and currency futures exchange rate
- (2) It is the possibility that the movements in the currency futures price and spot price will be different
- (3) It is the difference between fixed and floating interest rates
- (4) It is one of the reasons for an imperfect currency futures hedge

- A 1 only
- B 1 and 3
- C 2 and 4 only
- D 2, 3 and 4

- 5 Crag Co has sales of \$200m per year and the gross profit margin is 40%. Finished goods inventory days vary throughout the year within the following range:

	Maximum	Minimum
Inventory (days)	120	90

All purchases and sales are made on a cash basis and no inventory of raw materials or work in progress is carried. Crag Co intends to finance permanent current assets with equity and fluctuating current assets with its overdraft.

In relation to finished goods inventory and assuming a 360-day year, how much finance will be needed from the overdraft?

- A \$10m
 - B \$17m
 - C \$30m
 - D \$40m
- 6 **In relation to an irredeemable security paying a fixed rate of interest, which of the following statements is correct?**
- A As risk rises, the market value of the security will fall to ensure that investors receive an increased yield
 - B As risk rises, the market value of the security will fall to ensure that investors receive a reduced yield
 - C As risk rises, the market value of the security will rise to ensure that investors receive an increased yield
 - D As risk rises, the market value of the security will rise to ensure that investors receive a reduced yield
- 7 Pop Co is switching from using mainly long-term fixed rate finance to fund its working capital to using mainly short-term variable rate finance.

Which of the following statements about the change in Pop Co's working capital financing policy is true?

- A Finance costs will increase
 - B Re-financing risk will increase
 - C Interest rate risk will decrease
 - D Overcapitalisation risk will decrease
- 8 **In relation to an operating lease, which of the following statements is correct?**
- A All the risks and rewards of ownership transfer to the lessee
 - B The asset and lease obligation will be recorded in the statement of financial position
 - C The lease period will cover almost all of the leased asset's useful economic life
 - D The lessor will be responsible for repairs and maintenance of the leased asset
- 9 A company has annual after-tax cash flows of \$2 million per year which are expected to continue in perpetuity. The company has a cost of equity of 10%, a before-tax cost of debt of 5% and an after-tax weighted average cost of capital of 8% per year. Corporation tax is 20%.

What is the theoretical value of the company?

- A \$20m
- B \$40m
- C \$50m
- D \$25m

10 Which of the following would you expect to be the responsibility of financial management?

- A Producing annual accounts
- B Producing monthly management accounts
- C Advising on investment in non-current assets
- D Deciding pay rates for staff

11 Lane Co has in issue 3% convertible loan notes which are redeemable in five years' time at their nominal value of \$100 per loan note. Alternatively, each loan note can be converted in five years' time into 25 Lane Co ordinary shares. The current share price of Lane Co is \$3.60 per share and future share price growth is expected to be 5% per year. The before-tax cost of debt of these loan notes is 10% and corporation tax is 30%.

What is the current market value of a Lane Co convertible loan note?

- A \$82.71
- B \$73.47
- C \$67.26
- D \$94.20

12 Country X uses the dollar as its currency and country Y uses the dinar.

Country X's expected inflation rate is 5% per year, compared to 2% per year in country Y. Country Y's nominal interest rate is 4% per year and the current spot exchange rate between the two countries is 1.5000 dinar per \$1.

According to the four-way equivalence model, which of the following statements is/are true?

- (1) Country X's nominal interest rate should be 7.06% per year
- (2) The future (expected) spot rate after one year should be 1.4571 dinar per \$1
- (3) Country X's real interest rate should be higher than that of country Y

- A 1 only
- B 1 and 2 only
- C 2 and 3 only
- D 1, 2 and 3

13 Which of the following government actions would lead to an increase in aggregate demand?

- (1) Increasing taxation and keeping government expenditure the same
- (2) Decreasing taxation and increasing government expenditure
- (3) Decreasing money supply
- (4) Decreasing interest rates

- A 1 only
- B 1 and 3
- C 2 and 4 only
- D 2, 3 and 4

14 Peach Co's latest results are as follows:

	\$000
Profit before interest and taxation	2,500
Profit before taxation	2,250
Profit after tax	1,400

In addition, extracts from its latest statement of financial position are as follows:

	\$000
Equity	10,000
Non-current liabilities	2,500

What is Peach Co's return on capital employed (ROCE)?

- A 14%
- B 18%
- C 20%
- D 25%

15 Drumlin Co has \$5m of \$0.50 nominal value ordinary shares in issue. It recently announced a 1 for 4 rights issue at \$6 per share. Its share price on the announcement of the rights issue was \$8 per share.

What is the theoretical value of a right per existing share?

- A \$1.60
- B \$0.40
- C \$0.50
- D \$1.50

(30 marks)

Section B – ALL 15 questions are compulsory and MUST be attempted

Please use the grid provided on page two of the Candidate Answer Booklet to record your answers to each multiple choice question. Do not write out the answers to the MCQs on the lined pages of the answer booklet.

Each question is worth 2 marks.

The following scenario relates to questions 16 to 20.

Herd Co is based in a country whose currency is the dollar (\$). The company expects to receive €1,500,000 in six months' time from Find Co, a foreign customer. The finance director of Herd Co is concerned that the euro (€) may depreciate against the dollar before the foreign customer makes payment and she is looking at hedging the receipt.

Herd Co has in issue loan notes with a total nominal value of \$4 million which can be redeemed in 10 years' time. The interest paid on the loan notes is at a variable rate linked to LIBOR. The finance director of Herd Co believes that interest rates may increase in the near future.

The spot exchange rate is €1.543 per \$1. The domestic short-term interest rate is 2% per year, while the foreign short-term interest rate is 5% per year.

16 What is the six-month forward exchange rate predicted by interest rate parity?

- A €1.499 per \$1
- B €1.520 per \$1
- C €1.566 per \$1
- D €1.588 per \$1

17 As regards the euro receipt, what is the primary nature of the risk faced by Herd Co?

- A Transaction risk
- B Economic risk
- C Translation risk
- D Business risk

18 Which of the following hedging methods will NOT be suitable for hedging the euro receipt?

- A Forward exchange contract
- B Money market hedge
- C Currency futures
- D Currency swap

19 Which of the following statements support the finance director's belief that the euro will depreciate against the dollar?

- (1) The dollar inflation rate is greater than the euro inflation rate
- (2) The dollar nominal interest rate is less than the euro nominal interest rate

- A 1 only
- B 2 only
- C Both 1 and 2
- D Neither 1 nor 2

- 20 As regards the interest rate risk faced by Herd Co, which of the following statements is correct?
- A In exchange for a premium, Herd Co could hedge its interest rate risk by buying interest rate options
 - B Buying a floor will give Herd Co a hedge against interest rate increases
 - C Herd Co can hedge its interest rate risk by buying interest rate futures now in order to sell them at a future date
 - D Taking out a variable rate overdraft will allow Herd Co to hedge the interest rate risk through matching

The following scenario relates to questions 21 to 25.

Ring Co has in issue ordinary shares with a nominal value of \$0.25 per share. These shares are traded on an efficient capital market. It is now 20X6 and the company has just paid a dividend of \$0.450 per share. Recent dividends of the company are as follows:

Year	20X6	20X5	20X4	20X3	20X2
Dividend per share	\$0.450	\$0.428	\$0.408	\$0.389	\$0.370

Ring Co also has in issue loan notes which are redeemable in seven years' time at their nominal value of \$100 per loan note and which pay interest of 6% per year.

The finance director of Ring Co wishes to determine the value of the company.

Ring Co has a cost of equity of 10% per year and a before-tax cost of debt of 4% per year. The company pays corporation tax of 25% per year.

21 Using the dividend growth model, what is the market value of each ordinary share?

- A \$8.59
- B \$9.00
- C \$9.45
- D \$7.77

22 What is the market value of each loan note?

- A \$109.34
- B \$112.01
- C \$116.57
- D \$118.68

23 The finance director of Ring Co has been advised to calculate the net asset value (NAV) of the company.

Which of the following formulae calculates correctly the NAV of Ring Co?

- A Total assets less current liabilities
- B Non-current assets plus net current assets
- C Non-current assets plus current assets less total liabilities
- D Non-current assets less net current assets less non-current liabilities

24 Which of the following statements about valuation methods is true?

- A The earnings yield method multiplies earnings by the earnings yield
- B The equity market value is number of shares multiplied by share price, plus the market value of debt
- C The dividend valuation model makes the unreasonable assumption that average dividend growth is constant
- D The price/earnings ratio method divides earnings by the price/earnings ratio

25 Which of the following statements about capital market efficiency is/are correct?

- (1) Insider information cannot be used to make abnormal gains in a strong form efficient capital market
- (2) In a weak form efficient capital market, Ring Co's share price reacts to new information the day after it is announced
- (3) Ring Co's share price reacts quickly and accurately to newly-released information in a semi-strong form efficient capital market

- A 1 and 2 only
- B 1 and 3 only
- C 3 only
- D 1, 2 and 3

The following scenario relates to questions 26 to 30.

The following information relates to an investment project which is being evaluated by the directors of Fence Co, a listed company. The initial investment, payable at the start of the first year of operation, is \$3.9 million.

Year	1	2	3	4
Net operating cash flow (\$000)	1,200	1,500	1,600	1,580
Scrap value (\$000)				100

The directors believe that this investment project will increase shareholder wealth if it achieves a return on capital employed greater than 15%. As a matter of policy, the directors require all investment projects to be evaluated using both the payback and return on capital employed methods. Shareholders have recently criticised the directors for using these investment appraisal methods, claiming that Fence Co ought to be using the academically-preferred net present value method.

The directors have a remuneration package which includes a financial reward for achieving an annual return on capital employed greater than 15%. The remuneration package does not include a share option scheme.

26 What is the payback period of the investment project?

- A 2.75 years
- B 1.50 years
- C 2.65 years
- D 1.55 years

27 Based on the average investment method, what is the return on capital employed of the investment project?

- A 13.3%
- B 26.0%
- C 52.0%
- D 73.5%

28 Which of the following statements about investment appraisal methods is correct?

- A The return on capital employed method considers the time value of money
- B Return on capital employed must be greater than the cost of equity if a project is to be accepted
- C Riskier projects should be evaluated with longer payback periods
- D Payback period ignores the timing of cash flows within the payback period

29 Which of the following statements about Fence Co is/are correct?

- (1) Managerial reward schemes of listed companies should encourage the achievement of stakeholder objectives
 - (2) Requiring investment projects to be evaluated with return on capital employed is an example of dysfunctional behaviour encouraged by performance-related pay
 - (3) Fence Co has an agency problem as the directors are not acting to maximise the wealth of shareholders
- A 1 and 2 only
 - B 1 only
 - C 2 and 3 only
 - D 1, 2 and 3

30 Which of the following statements about Fence Co directors' remuneration package is/are correct?

- (1) Directors' remuneration should be determined by senior executive directors
- (2) Introducing a share option scheme would help bring directors' objectives in line with shareholders' objectives
- (3) Linking financial rewards to a target return on capital employed will encourage short-term profitability and discourage capital investment

- A** 2 only
- B** 1 and 3 only
- C** 2 and 3 only
- D** 1, 2 and 3

(30 marks)

Section C – BOTH questions are compulsory and MUST be attempted

Please write your answers to all parts of these questions on the lined pages within the Candidate Answer Booklet.

- 31** Nesud Co has credit sales of \$45 million per year and on average settles accounts with trade payables after 60 days. One of its suppliers has offered the company an early settlement discount of 0.5% for payment within 30 days. Administration costs will be increased by \$500 per year if the early settlement discount is taken. Nesud Co buys components worth \$1.5 million per year from this supplier.

From a different supplier, Nesud Co purchases \$2.4 million per year of Component K at a price of \$5 per component. Consumption of Component K can be assumed to be at a constant rate throughout the year. The company orders components at the start of each month in order to meet demand and the cost of placing each order is \$248.44. The holding cost for Component K is \$1.06 per unit per year.

The finance director of Nesud Co is concerned that approximately 1% of credit sales turn into irrecoverable debts. In addition, she has been advised that customers of the company take an average of 65 days to settle their accounts, even though Nesud Co requires settlement within 40 days.

Nesud Co finances working capital from an overdraft costing 4% per year. Assume there are 360 days in a year.

Required:

- (a) Evaluate whether Nesud Co should accept the early settlement discount offered by its supplier. (4 marks)
- (b) Evaluate whether Nesud Co should adopt an economic order quantity approach to ordering Component K. (6 marks)
- (c) Critically discuss how Nesud Co could improve the management of its trade receivables. (10 marks)
- (20 marks)**

- 32** Hebac Co is preparing to launch a new product in a new market which is outside its current business operations. The company has undertaken market research and test marketing at a cost of \$500,000, as a result of which it expects the new product to be successful. Hebac Co plans to charge a lower selling price initially and then increase the selling price on the assumption that the new product will establish itself in the new market. Forecast sales volumes, selling prices and variable costs are as follows:

Year	1	2	3	4
Sales volume (units/year)	200,000	800,000	900,000	400,000
Selling price (\$/unit)	15	18	22	22
Variable costs (\$/unit)	9	9	9	9

Selling price and variable cost are given here in current price terms before taking account of forecast selling price inflation of 4% per year and variable cost inflation of 5% per year.

Incremental fixed costs of \$500,000 per year in current price terms would arise as a result of producing the new product. Fixed cost inflation of 8% per year is expected.

The initial investment cost of production equipment for the new product will be \$2.5 million, payable at the start of the first year of operation. Production will cease at the end of four years because the new product is expected to have become obsolete due to new technology. The production equipment would have a scrap value at the end of four years of \$125,000 in future value terms.

Investment in working capital of \$1.5 million will be required at the start of the first year of operation. Working capital inflation of 6% per year is expected and working capital will be recovered in full at the end of four years.

Hebac Co pays corporation tax of 20% per year, with the tax liability being settled in the year in which it arises. The company can claim tax-allowable depreciation on a 25% reducing balance basis on the initial investment cost, adjusted in the final year of operation for a balancing allowance or charge. Hebac Co currently has a nominal after-tax weighted average cost of capital (WACC) of 12% and a real after-tax WACC of 8.5%. The company uses its current WACC as the discount rate for all investment projects.

Required:

- (a) Calculate the net present value of the investment project in nominal terms and comment on its financial acceptability.** (12 marks)

- (b) Discuss how the capital asset pricing model can assist Hebac Co in making a better investment decision with respect to its new product launch.** (8 marks)

(20 marks)