

# INSTITUTE AND FACULTY OF ACTUARIES



## EXAMINATION

28 April 2015 (pm)

### Subject CT2 – Finance and Financial Reporting Core Technical

*Time allowed: Three hours*

#### **INSTRUCTIONS TO THE CANDIDATE**

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *Mark allocations are shown in brackets.*
4. *Attempt all 20 questions. Answers to questions 1-10 should be indicated on the Multiple Choice Answer Sheet included in your booklet. From question 11 onwards begin your answer to each question on a new page.*
5. *Candidates should show calculations where this is appropriate.*

***Graph paper is NOT required for this paper.***

#### **AT THE END OF THE EXAMINATION**

*Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.*

*In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.*

*For questions 1–10 indicate in your answer book which one of the answers A, B, C or D is correct.*

- 1** Which of the following best explains what is meant by the “Euro” prefix in Eurobonds?
- A The bonds are denominated in Euros.
  - B The bonds are issued offshore, outside of legal or tax jurisdictions.
  - C The bonds are issued only in Europe.
  - D The bonds are regulated under European law.
- [2]
- 2** Which of the following is NOT a disadvantage of issuing preference shares?
- A Preference dividends can be suspended at the directors’ discretion.
  - B Preference dividends do not offer tax relief.
  - C Preference shares increase the gearing ratio.
  - D Shareholders have to be offered a higher rate than would be paid on an equivalent loan.
- [2]
- 3** Why might a company choose to attach a warrant to a bond issue?
- A Bondholders might accept a lower rate of interest in the expectation of a capital gain.
  - B Bondholders are attracted by the additional protection offered by a warrant.
  - C Warrants reduce the tax payable by the company.
  - D Warrants dilute shareholder returns.
- [2]
- 4** An investor is considering the purchase of a 2% Treasury Bill that is trading at a discount. Which of the following statements is correct?
- A The rate of return on this investment is equal to 2%.
  - B The rate of return on this investment is greater than 2%.
  - C The rate of return on this investment is less than 2%.
  - D The rate of return on this investment cannot be predicted.
- [2]

- 5** A new machine will cost a company £700,000 and will increase profits by £180,000 per year. The machine will be depreciated over ten years.

What is the payback period on this machine?

- A 2 years and 10 months
- B 3 years and 11 months
- C 6 years and 4 months
- D 10 years exactly

[2]

- 6** Which of the following best describes the need for the consistency concept in financial reporting?

- A All similar transactions should input into the bookkeeping records in the same way throughout the accounting period.
- B Financial statements prepared by an entity should be comparable from year to year.
- C Financial statements prepared by different entities should be comparable.
- D The users of financial statements should use consistent criteria for interpreting accounting information.

[2]

- 7** A company's trade receivables owed £200,000 at the beginning of the year and £250,000 at the end. Cash sales were £900,000 and credit sales were £1,700,000. How much cash was collected from customers during the year?

- A £1,650,000
- B £2,550,000
- C £2,600,000
- D £2,650,000

[2]

- 8** A business had assets at the beginning of the year worth £700,000 and liabilities worth £240,000. At the end of the year assets were worth £910,000 and liabilities were worth £260,000. The owners have not invested any equity and have received no dividend. What profit did the company make during the year?

- A £190,000
- B £210,000
- C £230,000
- D £650,000

[2]

- 9** Which group of users will be most interested in the fair value of a company's non-current assets?
- A business contacts
  - B employees
  - C lenders
  - D shareholders
- [2]
- 10** An 80% controlling interest was acquired in a subsidiary company when it had equity shares with a book value of £800,000 in issue and retained earnings of £600,000. The book value of the subsidiary's equity shares remain unchanged but retained earnings are now worth £900,000. What value should be attributed to the non-controlling interest in this subsidiary?
- A £60,000
  - B £180,000
  - C £280,000
  - D £340,000
- [2]
- 11** In many countries capital gains are only taxed when the taxpayer disposes of the asset on which the gain has arisen.
- Describe the implications of delaying the taxation of capital gains until the asset has been sold. [5]
- 12** Describe the advantages and disadvantages of issuing debenture stocks in order to raise finance. [5]
- 13** A software development company is considering raising funds to expand the business. The company's only significant asset is the office block that it uses to accommodate its programming and administrative functions.
- Explain the potential implications of raising funding through a sale and leaseback arrangement on the company's office block. [5]
- 14** A quoted company has had a difficult year and the directors believe that it may be too risky to maintain previous levels of dividend. However, they are considering maintaining the dividend in order to preserve stock market confidence.
- Describe the implications for the directors of maintaining the dividend in these circumstances. [5]

- 15** An investor maintains a balanced portfolio of shares. She tends to favour low beta securities. She was concerned to discover that the beta of a particular share that she has held for many years has increased over the past year.

Explain why a beta value might change. [5]

- 16** An investment project involves an initial investment, followed by five years with net cash inflows and a sixth year with a net cash outflow because the site used for the project will have to be repaired.

The project's internal rate of return (IRR) has been calculated. There are two internal rates of return: 2% p.a. and 9% p.a.

Explain how a project could have two internal rates of return and how this will affect the decision to accept or reject the project. [5]

- 17** An airline has been offered the opportunity to purchase an international express delivery company. The delivery company operates in the same countries as the airline. The airline's directors are considering this investment on the grounds of "strategic fit", even though the investment appears to have a negative net present value.

Describe the arguments for using strategic fit to justify this investment. [5]

- 18** Describe the importance of the standards set by the International Accounting Standards Board (IASB). [5]

- 19** The directors of Vapor receive a set of financial statements every month for discussion at their regular board meetings. The report for the month of February has just been prepared, along with comparative figures for the month of January.

Income statements for the month of:

	<i>February</i> £000	<i>January</i> £000
Revenue	900	700
Cost of goods sold	(368)	(175)
	<hr/> 532	<hr/> 525
Operating costs	(240)	(250)
Profit for the month	<hr/> 292	<hr/> 275

Statements of financial position at the end of:

	<i>February</i> £000	<i>January</i> £000
Property, plant and equipment	1,898	1,500
Current assets		
Inventory	32	220
Trade receivables	1,010	720
Cash		12
	<hr/> 1,042	<hr/> 952
	<hr/> 2,940	<hr/> 2,452
Equity		
Share capital	1,000	1,000
Retained earnings	1,384	1,092
	<hr/> 2,384	<hr/> 2,092
Current liabilities		
Cash	371	
Trade payables	185	360
	<hr/> 556	<hr/> 360
	<hr/> 2,940	<hr/> 2,452

During February, Vapor paid £400,000 for an item of equipment. The payment was funded using a bank overdraft as a temporary measure. Vapor will take out a £400,000 long term loan in May.

February's revenue includes a £200,000 sale to a registered charity at cost price. Apart from supporting the charity's work, this sale generated some valuable publicity for the company.

Vapor's directors receive a short table of accounting ratios to accompany their monthly financial statements. The production director has suggested that this table should be extended to include the figure for return on capital employed. The finance director has replied that the return on capital employed ratio should not be calculated on a monthly basis, but should be monitored annually.

- (i) Calculate the following ratios for January and February, making appropriate adjustments to the figures in respect of the information provided concerning the purchase of the new equipment and the sale to the charity:
- gross profit margin
  - current ratio
  - trade receivables turnover in days
  - trade payables turnover in days
- [8]
- (ii) Explain the reasons for the adjustments that you made in part (i) in respect of the information provided concerning the purchase of the new equipment and the sale to the charity. [6]
- (iii) Discuss the finance director's argument that the return on capital employed ratio should be reviewed annually, but not monthly. [6]
- [Total 20]

- 20 Exesses is a family-owned company that is in the process of recovering from a major corporate scandal. Exesses is a substantial business that is not quoted. None of its shareholders owns more than 5% of the equity shares. None of the shareholders is able to take an active role in the company's management.

Exesses' directors were all forced to step down because of the discovery that the directors had been overstating reported profits, which had the effect of inflating their profit-related bonuses. The directors also provided themselves with lavish lifestyles at the company's expense. For example, the company provided chauffeur-driven limousines to transport the directors on both business and personal travel.

The entire board of Exesses has resigned. The shareholders have met and have appointed a new chairman and a chief executive. Neither of these appointees have had anything to do with Exesses in the past. They have both agreed that their first priority is to appoint a new board and to structure the management arrangements so that the shareholders' confidence is restored.

The chairman has suggested that the new board should be structured as follows:

- The chairman will work on a part-time basis and will be responsible for the management of the board, including chairing board meetings. The chairman will be paid a fixed annual salary that offers an appropriate rate for the time that he is expected to commit to the company.
  - The chief executive will be employed on a full-time basis to manage the company itself and will receive both a substantial salary and a profit-related bonus.
  - Four additional full-time directors will be appointed to take charge of particular areas such as marketing and finance. Each will receive a similar package to the chief executive.
  - Two part-time directors will be appointed to participate in board meetings and to review corporate strategy. They will be paid a fixed salary.
  - The chief executive and each of the full-time directors will receive a 5% shareholding after satisfactorily completing three years on Exesses' board.
  - The chairman and the two part-time directors will appoint a new external audit firm. They will negotiate a contract with a much larger firm than the outgoing auditor and will pay a larger fee for the new auditor's services.
- (i) Discuss the suitability of the proposals for the appointment and remuneration of the new board of directors from the perspective of maintaining shareholder confidence. [12]
- (ii) Discuss the implications of appointing a larger and more expensive external audit firm to replace the present auditor. [8]

[Total 20]

**END OF PAPER**