

# EXAMINATIONS

12 September 2002 (pm)

## Subject 108 — Finance and Financial Reporting

*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 18 questions. From question 11 onwards begin each answer on a separate sheet.*

***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 Actuarial Tables and your own electronic calculator.*

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

**The following information relates to questions 1 to 3:**

Y plc is a quoted company. The following information has been extracted from the company's annual report and other sources:

	£m		
Earnings before interest and tax	36		
Interest	1.65		
Tax	9.9		
		<i>Book values</i>	<i>Market values</i>
		£m	£m
Share capital (£1 shares, fully paid)	40		178
Debenture stock	15		19

**1** Y plc's earnings per share figure is:

- A £0.14
- B £0.61
- C £0.86
- D £0.90

[2]

**2** The most relevant measure of Y plc's gearing for decision making purposes is:

- A 7.8%
- B 9.6%
- C 27.3%
- D 32.2%

[2]

**3** If prevailing interest rates increase, what is likely to happen to the market prices of Y plc's financial instruments?

- A Share price ↑ Debenture price ↑
- B Share price ↓ Debenture price ↑
- C Share price ↓ Debenture price ↓
- D Share price ↑ Debenture price ↓

[2]

**4** S plc has 20 million shares in issue, with a current market price of £5 a share. A rights issue will allow one share to be purchased for every five shares currently held by shareholders for £3 each. Which of the following is true?

- A The number of shares in issue will fall to 16 million.
- B The firm will raise £32 million.
- C The share price will fall to £4.67.
- D The total value of the company will decrease to £88 million.

[2]

- 5** Which of the following would NOT affect an income tax calculation?
- A contributions made to an approved pension scheme
  - B benefits in kind
  - C personal allowance
  - D income from an ISA
- [2]
- 
- 6** Why might a scrip issue lead to an overall increase in a company's market capitalisation?
- A there are more shares in issue
  - B shareholders can sell their new shares without affecting their original holding
  - C scrip issues are only possible if the company has been profitable in past
  - D scrip issues are often interpreted as a sign of confidence on the part of the directors in the future performance of the company
- [2]
- 
- 7** Which of the following will calculate a company's taxable profit?
- A accounting profit + capital allowances + depreciation  
+ franked investment income
  - B accounting profit – capital allowances – depreciation  
– franked investment income
  - C accounting profit – capital allowances + depreciation  
– franked investment income
  - D accounting profit + capital allowances – depreciation  
– franked investment income
- [2]
- 
- 8** Building societies will normally NOT invest surplus cash in the following:
- A Short dated gilts
  - B Banks using certificates of deposit
  - C Ordinary shares
  - D Local authority bonds
- [2]

- 9** Which of the following statements about gilt-edged market makers (GEMMs) is NOT true?
- A The Bank of England licences GEMMs.
  - B Only the GEMMs can buy, sell or borrow existing gilts directly from the Bank of England.
  - C They are given no special tax treatment.
  - D Only the GEMMs can make a market in gilts. [2]
- 10** Which of the following is NOT a valid reason for using simulation in order to evaluate an investment project?
- A the cash flows are uncertain
  - B the required rate of return might vary during the life of the project
  - C decision makers are interested in the range of possible outcomes
  - D decision makers require an accurate forecast [2]
- 11** Explain how the statement of net assets for a pension fund differs from the balance sheet of a company reporting under the requirements of the Companies Act. Outline reasons for these differences. [5]
- 12** Describe the differences between a bank overdraft and a bank loan and indicate how each might be used by a business. [6]
- 13** A company has been offered the following mutually exclusive investment projects:

	<i>Project 1</i>	<i>Project 2</i>
Initial investment	£400,000	£80,000
Payback	6 years	3 years
Internal rate of return	9%	13%
Net present value	£63,000	£10,500

- (i) Explain why the three investment criteria — payback, internal rate of return (IRR) and net present value (NPV) — might have given different rankings for the two projects. [3]
- (ii) Explain which of the two projects is the optimal investment project for the company, based on the information given. [3]

[Total 6]

- 14** Most businesses of any size operate as a group of companies and these are required to prepare and publish consolidated financial statements.
- (i) Explain why consolidated statements are preferable to having the statements of each of the companies in the group. [4]
  - (ii) Identify TWO figures that you would expect to find in a consolidated balance sheet that would not normally appear in an individual company's accounts. Explain what each of these figures reflects. [6]  
[Total 10]
- 15** Harold and Maude are in the process of setting up a risk management consultancy. They have known each other for a relatively short time, but have decided to go into business together. The initial setting up costs will be fairly substantial: the business will need to pay a deposit on a leased office and will have to purchase computers and other office equipment. Maude has agreed that she will fund most of these from her savings, with Harold providing roughly 10%. Harold and Maude have agreed that both will work full-time in the business and that each will probably contribute equally to the success and profitability of the enterprise.
- (i) Explain the relative advantages and disadvantages of setting up this business as a partnership and as a limited company. [4]
  - (ii) Assuming that Harold and Maude decide to incorporate the business as a limited company, describe the best way to organise their interests in terms of Maude's investment in the initial setting up and the equitable sharing of profits and losses. [4]  
[Total 8]
- 16** Explain the possible uses by a non-financial company of swaps. [5]

- 17** The directors of D plc have decided to review their decision to invest £12 million in new equipment. They have decided that their initial decision to make this investment had not been adequately justified in terms of formal investment appraisal techniques.

In the past, the directors have appraised all investments by discounting the expected cash flows at 9.5% per annum. This required rate of return is based on the interest rate likely to be charged by D plc's bank on a term loan. They have, however, recently decided that it would be more appropriate to relate the required rate of return to the risk associated with the investment. They have decided to apply the Capital Asset Pricing Model (CAPM) when appraising investment opportunities.

The directors have decided that the investment in the new equipment constitutes an expansion of the company and that it would be appropriate to use the Beta coefficient of the company as a whole as a surrogate for the project Beta. The company's stockbrokers have advised them that the company Beta is 0.6. The risk free rate is 3% and the risk premium is 8%.

- (i) Calculate the required rate of return for the investment project using the Capital Asset Pricing Model (CAPM). [2]
  - (ii) Explain how a highly risky project, such as investment in a high technology industry, might have a relatively low required rate of return in the context of a portfolio of investments. [8]
  - (iii) Explain how the beta coefficient of a project might be estimated. [5]
  - (iv) Explain how the share price of a company quoted on the stock exchange should move in response to an investment in a project with a positive net present value. [5]
- [Total 20]

**18** The following information has been extracted from the bookkeeping records of B plc:

B plc

Trial Balance as at 31 August 2002.

	£000	£000
Administrative expenses	435	
Bank		14
Cost of goods sold	800	
Creditors		110
Debtors	240	
Interest	110	
Land and Buildings — cost	2,300	
Land and Buildings — depreciation		180
Loan		1,400
Plant and Machinery — cost	900	
Plant and Machinery — depreciation		350
Profit and loss as at 31 August 2001		180
Sales		2,600
Selling and distribution costs	850	
Share capital		500
Share premium		400
Stock as at 31 August 2002	99	
	<u>5,734</u>	<u>5,734</u>

Notes:

- (1) Depreciation is to be charged on the following bases:  
     Factory — 3% of cost;  
     Plant and Machinery — 25% of reducing balance.  
     All depreciation is to be charged to the cost of sales.
  - (2) The directors have decided to pay a dividend of £150,000 for the year.
  - (3) The corporation tax charge has been estimated at £40,000 for the year.
- (i) Prepare B plc's profit and loss account for the year ended 31 August 2002 and its balance sheet as at that date. These should be in a form suitable for publication insofar as this is possible from the information provided. [14]
  - (ii) The directors of B plc are under some pressure to report a higher than normal profit figure this year. It has been suggested that they might reduce the depreciation charge by revising their estimate of the useful lives of fixed assets.

Explain whether it would be possible to restate profit by artificially depressing the depreciation charge. [6]

[Total 20]