

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

10 September 2025

Subject CB1 – Business Finance Core Principles

Time allowed: Three hours and twenty minutes

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

- 1** Company H is a quoted manufacturing company. Company H's directors are considering whether to proceed with an investment project or not.

Which of the following is an agency issue associated with the investment decision relating to this project?

- A Company H will have to borrow heavily to finance this project
- B It is difficult to predict the future cash flows associated with the project
- C The company's shareholders have been pressing for expansion
- D The project is expected to increase the directors' profit-related bonus.

[2]

- 2** Company J was founded by two individuals, each of whom owns 50% of the company's shares. The individuals have no other significant assets.

Which of the following would enable those individuals to determine Company J's cost of equity?

- A Analyse Company J's share price movements over time
- B Ask Company J's founders to indicate their required rate of return
- C Divide Company J's dividends by the founders' equity investment
- D Review share prices of quoted companies in the same industry.

[2]

- 3** A company's 10% loan stock has a nominal value of \$20 million and a market value of \$15 million. The company pays tax at 30%.

What is the company's net cost of debt?

- A 5.3%
- B 7.0%
- C 9.3%
- D 13.3%.

[2]

- 4** Company S has 10 million shares in issue. Its share price is \$4.00. The directors wish to make a one for five rights issue at \$3.80 per share in order to fund an expansion that will cost \$7 million. The expansion will have a net present value of \$1.5 million. Any surplus funds will be retained in the company.

What will Company S's share price be after the issue?

- A \$3.33
- B \$3.46
- C \$3.51
- D \$3.97.

[2]

5 Company Q has borrowed from several different sources. Which debt will have priority in the event of default by Company Q?

- A Floating charge debenture
- B Mortgage debenture
- C Overdraft
- D Term loan.

[2]

6 D, E and F are in partnership. The business has failed, owing debts of \$300,000. The partners have the following personal assets:

- D \$400,000
- E \$100,000
- F \$60,000.

How much will D have to pay to the partnership's creditors?

- A \$100,000
- B \$120,000
- C \$140,000
- D \$300,000.

[2]

7 Which of the following is responsible for the governance of a quoted company?

- A The audit firm
- B The board of directors
- C The shareholders
- D The stock exchange.

[2]

8 Which of the following would be the responsibility of the treasurer of a quoted company?

- A Liaising with an external audit partner
- B Managing capital investments
- C Negotiating an overdraft with the bank
- D Preparing financial statements.

[2]

9 Which of the following governance issues are associated with risk?

- A Risk should be assessed and reported
- B Risk should be avoided
- C Risk should be managed by a designated director
- D Risk should be the responsibility of internal audit.

[2]

10 Company U's statement of financial position includes the following balances:

- property, plant and equipment of \$100 million
- intangible non-current assets of \$40 million
- a mortgage loan, which has priority in the event that Company U is wound up, of \$30 million
- a 5-year loan of \$25 million
- current liabilities of \$8 million.

What is the asset cover on the 5-year loan?

- A 1.67
- B 1.82
- C 2.40
- D 3.68.

[2]

11 Company L is based in Maxland and is quoted on the Maxlandian Stock Exchange. The Maxland Code is similar to the UK's Corporate Governance Code. The Maxland Code is enforced on a 'comply or explain' basis.

Discuss the advantages of complying with the Maxland Code.

[5]

12 A pension fund is interviewing R for the position of investment manager. R clearly has a deep understanding of the principles of investment and of capital markets. R also has strongly held personal values and, if appointed, will divest the fund of all investments that are in conflict with those values. Future investments will be made in accordance with those values.

Discuss the arguments for and against appointing R as the pension fund's investment manager.

[5]

13 Discuss the difficulties associated with predicting a quoted company's share price after it has completed a rights issue.

[5]

- 14** Company K is an actuarial consultancy that has recently been created to provide actuarial advice to small businesses. The owners of Company K are considering entering into a non-recourse factoring arrangement.

Discuss the advantages and disadvantages of non-recourse factoring to Company K.

[5]

- 15** Company G has a policy of seeking a 12% return on any capital projects. Managers who wish to propose a project must submit a project appraisal that indicates that the project's projected cash flows have a positive net present value when discounted at 12%.

Discuss the disadvantages of Company G's approach to project appraisal.

[5]

- 16** An investor has a diversified portfolio of investments in quoted companies' equity shares. The investor is considering whether to expand the portfolio by investing in shares in Company T.

Recommend with reasons whether the investor should use Company T's geared or ungeared beta in deciding whether to make this investment.

[5]

- 17** Explain the purpose of sustainability reporting.

[5]

- 18** An investor has a policy of investing in companies that have high dividend yields.

Evaluate the investor's policy.

[5]

- 19** The information provided below was obtained from Z's bookkeeping records on 30 June 2025.

- (i) Prepare the following financial statements for Z, in a form suitable for publication:
- | | |
|--------------------------------------|-----|
| (a) statement of profit or loss | [6] |
| (b) statement of changes in equity | [2] |
| (c) statement of financial position. | [7] |
- (ii) Discuss the usefulness of the valuation of property, plant and equipment at cost less accumulated depreciation. [5]
- [Total 20]

Z

Trial balance as at 30 June 2025

	\$000	\$000
Administrative expenses	15,380	
Bank	3,425	
Cost of sales	75,758	
Directors' salaries	9,850	
Dividends paid	5,000	
Inventory	9,770	
Loan interest	400	
Loans (repayable 2035)		6,000
Property, plant and equipment – accumulated depreciation		15,500
Property, plant and equipment – cost	77,000	
Retained earnings		20,120
Revenue		180,253
Selling expenses	51,200	
Share capital		20,000
Share premium		17,000
Trade payables		2,450
Trade receivables	13,540	
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	261,323	261,323

- Depreciation at 10% of cost has still to be charged on property, plant and equipment.
- Depreciation is treated as part of cost of sales.
- Only two thirds of the loan interest for the year has been paid and recorded.
- The tax charge for the year has been estimated at \$15,000.

- 20** Company D is a quoted company that manufactures household cleaning materials. Company D has developed a new formula that will reduce the environmental damage caused by its products. Putting that formula into production will require a significant investment in new equipment and launching the new products will require an expensive advertising campaign.

Company D's gearing ratio is currently 25%. Borrowing to raise the finance for the new equipment would increase Company D's gearing to 40%. Company D's existing lender is willing to provide an additional loan for the required amount, but Company D's board has decided to make a rights issue instead.

The advertising campaign to launch the new products will start in 12 months. The board is considering using cash set aside for the payment of next year's dividend to finance the campaign. If the product launch is as successful as the board hopes, the additional profits will enable Company D to increase its dividend in future years.

- (i) Discuss the potential agency issues arising from the board's decision to make a rights issue rather than borrowing to finance the purchase of the new equipment. [6]
- (ii) Discuss the difficulties that may arise from the suspension of next year's dividend and recommend a response, stating reasons. [8]
- (iii) Discuss the advantages and disadvantages to Company D of achieving growth through the development and launch of this new range of products. [6]

[Total 20]

END OF PAPER

