

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

22 April 2024 (am)

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.

If you encounter any issues during the examination please contact the Assessment Team on T. 0044 (0) 1865 268 873.

- 1** The shareholders of Company F, a quoted media company, are concerned that their directors lack the ability to manage the company effectively. How might the capital market support Company F's shareholders if their concerns are valid?
- A Company F's market listing will be suspended
 - B Governance regulations will be enforced
 - C Quoted company share prices will be compared
 - D Rival companies will acquire Company F at a premium.
- [2]
- 2** Company S wishes to remunerate its executive directors in a manner that aligns their interests with those of the shareholders. Which form of remuneration will achieve that objective?
- A A generous annual salary
 - B A percentage of reported profit
 - C An annual allocation of shares
 - D The use of a company car.
- [2]
- 3** An individual has served as a lending officer for K Bank for the past year. During that time the lending officer has become increasingly concerned that K Bank is making loans recklessly to borrowers who cannot afford to repay those loans.
- Which of the following reflects the lending officer's ethical responsibility?
- A The lending officer should ask K Bank's board to resign
 - B The lending officer should ignore the matter
 - C The lending officer should report the problem to the press
 - D The lending officer should resign from K Bank.
- [2]
- 4** Which of the following explains the purpose of Double Taxation Relief (DTR)?
- A DTR enables countries to receive more tax
 - B DTR prevents profit from being taxed twice
 - C DTR safeguards countries' economic interests
 - D DTR simplifies the calculation of tax liabilities.
- [2]

5 Which of the following would explain why an investor would invest in a company that had a negative beta coefficient?

- A The investor does not wish to diversify upside risk
- B The investor does not wish to invest in a portfolio
- C The investor wishes to limit exposure to systematic risks
- D The investor wishes to pay less because of the negative beta.

[2]

6 An actuary is considering purchasing a pocket calculator costing \$80. The Internal Rate of Return (IRR) of this investment is 800%.

Which of the following statements is a logical interpretation of this IRR?

- A Several calculators should be purchased
- B The actuary has calculated the IRR incorrectly
- C The small initial investment has driven the high IRR
- D There must be multiple IRRs for this investment.

[2]

7 Company R plans to make an investment in a project with a positive Net Present Value (NPV). Confidential briefings of investment analysts who specialise in Company R's industry indicate that the analysts do not believe that the project will succeed.

How does the shareholder value approach suggest that the project will affect Company R's share price?

- A The share price will decrease because of the analysts' opinions
- B The share price will increase because of the positive NPV
- C The share price will increase because shareholders will trust Company R's directors
- D The share price will remain unchanged because of the uncertainty.

[2]

8 Which of the following is true of opportunity costs in a project appraisal?

- A Opportunity costs are irrelevant to project evaluation
- B Opportunity costs arise only when capital is rationed
- C Opportunity costs exist only when there are alternatives
- D Opportunity costs should be reflected in project cash flows.

[2]

- 9** G plans to use their savings to open a holiday resort specialising in beach holidays in their hometown. The business will be G's only investment and their only significant asset. The weather in G's hometown can be very variable and unpredictable.

Which of the following is true of the risk faced by G because of the weather?

- A G cannot mitigate the risk associated with bad weather
- B G should ignore the risk because it is unsystematic
- C G should not distinguish systematic and specific risks
- D G should not invest in this business because it is risky.

[2]

- 10** Company T's earnings per share is £3.00 and its dividends per share is £1.20.

What is the company's dividend cover?

- A 0.4
- B 0.6
- C 1.5
- D 2.5.

[2]

- 11** Explain the implications of information asymmetries for sound corporate governance. [5]

- 12** H is a software designer who is working on a program that has a large potential market. H requires a large injection of funding to complete the development and fund the marketing of their program. They are considering offering convertible loan stock to potential investors.

Explain the advantages and disadvantages to H of issuing convertible loan stock. [5]

- 13** Explain the role of shadow banks. [5]

- 14** An airline is planning to acquire four new aircraft, financing the acquisition using a finance lease.

Explain the advantages of leasing an asset compared to taking out a loan in order to purchase the asset outright. [5]

- 15** A retailer operates as a sole trader. The retailer is considering incorporating the business as a limited company.

Explain the advantages and disadvantages of incorporating this business. [5]

16 Company M, a manufacturer, intends to build a new factory in which skilled staff will operate complex and dangerous machinery.

Recommend, with reasons, a suitable means of mitigating the risk of injury to staff and the resulting risks to Company M. [5]

17 Explain why parent companies are required to publish consolidated financial statements rather than focusing on the financial statements of the parent company itself. [5]

18 Company G's return on capital employed is significantly higher when calculated as profit before tax divided by equity than when it is calculated as profit before tax and interest divided by the total of equity and long-term debt.

Explain the implications of that difference for the analysis of Company G's performance. [5]

- 19 The information provided below was obtained from Company V's bookkeeping records on 31 March 2024.

Company V

Trial balance as at 31 March 2024

	\$000	\$000
Administrative expenses	8,120	
Bank	1,720	
Cost of goods sold	28,800	
Directors' salaries	5,100	
Dividends paid	2,000	
Inventory	6,250	
Loan interest	260	
Loans (repayable 2030)		2,400
Property, plant and equipment – accumulated depreciation		7,000
Property, plant and equipment – cost	43,000	
Retained earnings		9,250
Revenue		90,860
Selling expenses	26,100	
Share capital		10,000
Share premium		14,000
Software licence – cost	6,000	
Trade payables		980
Trade receivables	7,140	
	<u>134,490</u>	<u>134,490</u>

The software licence was purchased for \$6 million on 1 April 2023. No entries have been made in the bookkeeping records other than the purchase. The software is used to analyse sales and to enhance Company V's marketing activities. The useful life of the software has been estimated at 10 years.

The tax charge on the year's profits has been estimated at \$5 million.

An error has been discovered in the inventory figure. The value according to the trial balance has been overstated by \$70,000.

- (i) Prepare the following financial statements for Company V, 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) Explain your treatment of the information relating to the software licence. [5]
- [Total 20]

20 Q is a quoted airline company that operates a network of intercontinental flights. Q has 100 million shares in issue and the company has a market capitalisation of \$1.1 billion.

Q's board plans to acquire 100% of L, a quoted hotel company. L owns hotels in many of the countries that are served by Q's flights. Q's directors believe that doing so will enable Q to offer holiday packages as well as flights and so will be more profitable.

L has 50 million shares in issue and the company has a market capitalisation of \$0.5 billion. Q's board plans to issue 50 million new shares and exchange one new share for each of L's existing shares.

Each of Q's directors is remunerated with a salary and a percentage of Q's annual profit.

- (i) Evaluate the planned acquisition of L as a means of creating growth for Q. [7]
 - (ii) Evaluate the agency implications for Q's shareholders of the proposal by Q's directors to acquire L. [7]
 - (iii) Discuss the possibility that L's directors will advise L's shareholders to reject Q's proposal once it has been announced. [6]
- [Total 20]

END OF PAPER