INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

23 April 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 L's debentures have a face value of $10 million and a market value of $8 million.

Which of the following is a valid potential explanation for the difference between the two prices?

A Company L has announced a rights issue.
B Company L has recently taken out a term loan.
C Market interest rates increased after the debentures were issued.
D The debentures are almost due for redemption.

[2]

2 Company K plans to issue additional equity shares. The share issue has not yet been announced. The company's shares have a nominal value of $1.00 and their market value is currently $1.40.

Which of the following describes the constraints on the issue price for the new shares?

A The directors must not issue the shares for less than $1.00 and may be unable to issue them for more than $1.40.
B The directors are not allowed to issue the shares for less than $1.00 or for more than $1.40.
C The directors are not allowed to issue the shares for less than $1.40.
D The directors must not issue the shares for more than $1.40 but can issue them at any price below that.

[2]

3 Company M has a remuneration committee that decides on the salaries, bonuses and other compensation paid to executive directors.

Which of the following factors will ensure the remuneration committee is meeting its objectives?

A Clear and transparent reporting to shareholders.
B Ensuring that Company M pays at least as much as rival companies.
C Executive directors participate in committee meetings.
D Seeking feedback from executive directors on their satisfaction.

[2]

4 Which of the following is fully consistent with the objective of maximising shareholder wealth?

A Maximising expectations of future dividend payments.
B Maximising future profits from trading activities.
C Maximising the net present value of future cash flows.
D Maximising the use of inexpensive debt finance.

[2]

5 Company F has purchased a European style call option that gives it the right to buy \$10 million for £7.7 million. The exchange rate a month before the option expired was \$1 = £0.76.

Which of the following is correct?

A The option can be retained with no further action required.
B The option must be exercised at a cost of £7.6 million.
C The option must be exercised at a cost of £7.7 million.
D The option should be cancelled because it will have no value at expiry.

[2]

6 G is a shareholder in Company H, a quoted company. Company H has offered a scrip dividend alternative to accepting a cash dividend. Which of the following would be a logical reason for G to accept the scrip dividend alternative?

A G expects a decrease in Company H's share price.
B G is short of cash.
C G wishes to invest more in Company H.
D G prefers to be taxed on capital gains.

[2]

7 Company J is considering a project that has the following expected values:

- initial investment – net present value \$30,000
- gross revenues – net present value \$100,000
- running costs – net present value \$45,000.

What is the receipts/costs ratio of this project?

A 0.8
B 1.3
C 2.2
D 3.3.

[2]

8 Company N is considering investing in a project that will create significant health and safety risks for Company N's employees.

Which of the following methods of mitigation would be classified as reducing the health and safety risk?

A Insuring against industrial accidents.
B Making employees accept the risk in writing.
C Subcontracting manufacturing to a supplier.
D Training staff to operate equipment correctly.

[2]

9 A project's revenues have been estimated as having a 50% likelihood of being \$10,000 and a 50% likelihood of being \$12,000.

The company's directors would be willing to accept a payment of \$10,500 as an alternative to the predicted outcome.

What is the certainty equivalent of the project's revenues?

A $10,000
B $10,500
C $11,000
D $12,000.

[2]

10 The statement of financial position always 'balances', with the total value of assets being equal to the total of equity and liabilities. Which accounting concept explains this?

A Accruals
B Business entity
C Dual aspect
D Matching.

[2]

11 Company Q is a quoted company that manufactures steel. The company's Chief Financial Officer (CFO) is an executive director who is responsible for the strategic management of Company Q's finances. Company Q employs a treasurer to monitor and manage cash flows and to maintain an effective working relationship with the banks that are Company Q's lenders.

Discuss the importance of the working relationship between Company Q's CFO and its treasurer. [5]

12 Company R is a UK-based quoted company. Company R's directors are reluctant to commit themselves to publishing a clear statement of the company's purpose, values and strategy because they believe that to do so may constrain the company's ability to adapt to change.

Discuss the disadvantages of the directors' refusal to publish such a statement. [5]

13 Explain why it is unusual for companies to issue preference shares when raising funds. [5]

14 Company V is an unquoted company that manufactures medical products. The company is owned by four members of the V family, all of whom take an active part in the company's management.

Company V plans to launch a new product and requires funds to build a factory and purchase equipment.

Explain the arguments for raising the necessary funds by borrowing rather than by seeking a stock exchange quotation through an offer for sale. [5]

15 Company U is a quoted company. Company U's draft financial statements disclose that a substantial investment has been made in product development, but the nature of the product that is under development has not been stated. Company U's board does not plan to launch the new product for at least 6 months after the publication of the financial statements.

Discuss the arguments for and against disclosing the nature of the new product that U has under development. [5]

16 The directors of a quoted company are considering investing in a major investment project.

Recommend, with reasons, whether the directors should evaluate the project in relation to its systematic or its specific risk when considering shareholder value. [5]

17 Explain why the prudence concept may be particularly important in the preparation of an insurance company's financial statements. [5]

18 Explain the significance of an unmodified audit report accompanying a company's financial statements. [5]

19 Companies S and T are both being considered as potential suppliers by Company P, a major manufacturing company. Company P wishes to award a contract to a single company to provide it with packaging materials for at least the next 5 years.

Company P wishes to evaluate both companies' financial risks. Company P will rely heavily on the winning company and so it will be costly if that company fails.

Company S owns its factory. Company T rents a factory from a third party, paying annual rent of $7 million. Company T owns no property.

(i) Using the financial statements for Companies S and T, calculate the following ratios for Companies S and T:

- Asset gearing ratio
- Interest cover
- Current ratio, excluding the tax liability from the calculation.

[6]

(ii) Evaluate the financial risks faced by both companies and identify, with reasons, the company facing the lower risk. [10]

(iii) Recommend, with reasons, whether or not the current ratios of the two companies should include the tax liability. [4]

[Total 20]

Statements of profit and loss
For the year ended 31 March 2026

	Company S	*Company T*
	$ million	*$ million*
Revenue	120	98
Cost of sales	(45)	(43)
Gross profit	75	55
Distribution costs	(11)	(10)
Administrative expenses	(12)	(11)
Operating profit	52	34
Finance costs	(9)	(3)
Profit before tax	43	31
Income tax expense	(10)	(6)
Profit for the year	33	25

Statements of financial position
as at 31 March 2026

	Company S	*Company T*
	$ million	*$ million*
Non-current assets		
Property, plant and equipment	225	128
Current assets		
Inventory	5	9
Trade receivables	11	5
Bank	4	2
	20	16
Total assets	245	144
EQUITY AND LIABILITIES		
Equity		
Ordinary share capital	90	55
10% preference share capital	70	–
Retained earnings	27	18
Total equity	187	73
Non-current liabilities		
5% loans (repayable 2036)	40	60
Current liabilities		
Trade payables	8	5
Tax (payable December 2026)	10	6
	18	11
Total of equity and liabilities	245	144

20 Company Z is a major quoted retailer that owns 250 large shops in various towns and cities across its home country. Company Z also owns a large fulfilment centre that manages online sales.

Company Z's shop sales are declining while its online sales are increasing. Company Z's board plans to sell the 50 shops that have the poorest sales for $400 million. The board plans to use that cash to buy back a proportion of each shareholder's shares, paying a small premium over the market price as at the date of the buyback. This plan has been announced even though it will take a year to complete the sale and make the share buyback.

(i) Explain how Company Z's share price is likely to react to the board's announcement of the shop sale and share buyback. [7]

(ii) Evaluate the logic of announcing the shop sale and share buyback at this early date rather than waiting until the transactions can be completed. [8]

(iii) Discuss the logic of using the cash raised from the shop sale for a share buyback rather than a dividend. [5]

[Total 20]

END OF PAPER

Institute and Faculty of Actuaries

EXAMINERS' REPORT

CB1- Business Finance

Core Principles

April 2025

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

For some candidates, this may be their first attempt at a professional qualification examination. The Examiners expect all candidates to have a good level of knowledge and understanding of the topics and therefore candidates should revise thoroughly to prepare for closed- book and in-person examinations. In our experience, candidates that are insufficiently prepared are not successful because of lack of knowledge, time management issues and/or because they do not properly answer the questions.

Many candidates rely on past exam papers and examiner reports in preparing for exams. Great caution must be exercised in doing so because each exam question is unique. As with all professional examinations, it is insufficient to repeat points of principle, formula or other textbook works. The examinations are designed to test "higher order" thinking including candidates' ability to apply their knowledge to the facts presented in detail, synthesise and analyse their findings, and present conclusions or advice. Successful candidates concentrate on answering the questions asked rather than repeating their knowledge without application.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Sarah Hutchinson
Chair of the Board of Examiners
June 2025

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the Business Finance Core Principles subject is to provide a basic understanding of corporate finance, including a knowledge of the instruments used by companies to raise finance and manage financial risk and to provide the ability to interpret the accounts and financial statements of companies and financial institutions.

2. This paper examines basic finance, including raising funds by a variety of methods, taxation, net present value and project appraisal and other topics, it has both calculations and essay type questions on these topics. The paper also examines financial reporting including preparation of the main financial statements and interpretation of financial statements. It also considers the basis of the preparation of statements and the information needs of a variety of end users of financial statements.

3. Different numerical answers may be obtained to those shown in these solutions depending on whether figures obtained from tables or from calculators are used in the calculations but candidates are not penalised for this. However, candidates may lose marks where excessive rounding has been used or where insufficient working is shown.

B. Comments on *candidate performance in this diet of the examination*

Candidates' performance was a little weaker than usual. The exam was closed book this diet which may have accounted for the slightly poorer performance. Question 19 was on three specific ratios and discussion of these. The answers to this question which had three parts were a little weaker than expected. Question 20 which was also worth 20 marks, was reasonably well answered apart from the third part which was poorer.

In general, the multiple choice questions were reasonably well done as were some of the short questions.

The area which candidates' performance was weakest was finance, it would help candidates' performance if they memorised the key finance concepts and practiced applying these to questions from past papers.

The results were slightly poorer than in the past few diets, however there were still some excellent scripts.

C. Pass Mark

The Pass Mark for this exam was 58.
1120 presented themselves and 658 passed.

Solutions for Subject CB1 - April 2025

Q1	C	[2]
Q2	A	[2]
Q3	A	[2]
Q4	C	[2]
Q5	A	[2]
Q6	C	[2]
Q7	B	[2]
Q8	D	[2]
Q9	B	[2]
Q10	C	[2]
		[Total 20]

Commentary:
Most candidates performed well in the multiple choice questions.

Q11

The responsibilities of the CFO and treasurer are complementary. The CFO is responsible for financial management at a strategic level, while the treasurer is a senior manager who implements strategy. [1]

The treasurer must be kept aware of changes to strategy and other strategic decisions, such as the need to raise large loans because it will be the treasurer's responsibility to supervise the preparation of documentation and the negotiation with lenders. [1]

Similarly, the CFO will rely on the treasurer to provide warnings of any serious problems, such as anticipated cash shortages in the foreseeable future. [1]

The CFO has a much wider remit than finance, being a member of the board. Directors have a duty to participate in strategic planning of all aspects of the business. [1]

The treasurer focusses on financial management and enables the CFO to devote time and attention to other aspects of the business. [1]

[Maximum 5]

[Total 5]

Commentary:
This question was answered well by many candidates. Candidates were able to discuss the roles of the CFO and treasurer well and understood that the roles were complementary which was very good.

Q12

Stakeholders are often interested in an entity's claims concerning purpose, values and strategy. Many stakeholders are keen to ensure that their values are aligned with those of the counterparts with whom they do business. [1]

Refusing to publish a statement could cost the entity business if, say, a potential customer has made public commitments that satisfy its concerns with regard to, say, employee's rights. [1]

Refusal to volunteer this information could imply that the entity has reason to believe that potential stakeholders will be unwilling to work with it. [1]

The lack of a comprehensive statement implies that the entity's progress towards achieving its purpose, values and strategy cannot be monitored and measured. [1]

If the board is perceived as being unwilling to be transparent in those areas then it is likely that they will be perceived as lacking in confidence. [1]

[Maximum 5]

[Total 5]

Commentary:
Many candidates discussed the points in the examiner's solution fairly well. *Most candidates mentioned the lack of transparency which could make shareholders lack confidence in the company.*

Q13

Preference shareholders rank after lenders and creditors in the event that the company cannot pay their dividends or repay their investment in the event of financial difficulties. [1]

That suggests that the return offered on preference shares will have to be greater than the interest on loans, otherwise it would be unlikely that investors would buy them. [1]

Preference dividends are not allowed as an expense for tax purposes, unlike interest on loans. [1]

The lack of tax relief combined with the high rate of return makes preference shares very expensive. [1]

Preference shares create the same risks to ordinary shareholders as debt, so issuing preference shares has the effect of increasing gearing. [1]

[Maximum 5]

[Total 5]

Commentary:
This question was answered reasonably well with many candidates making good points about the interest on preference shares and mentioning that the interest did not get tax relief. *Rather than just state these points as facts the candidates did apply their knowledge and discuss the points well.*

Q14

The most immediate advantage of borrowing is that the family business will retain its identity. The current shareholders will be able to remain in charge of the business. [1]

A quotation will force the members of family V to take the new shareholders' wishes into consideration and the culture of the company might change. [1]

The capital market might be reluctant to invest if the V family will retain a significant, possibly even a controlling, interest because external shareholders' interests might be difficult to enforce. [1]

Borrowing is likely to prove cheaper. The cost of debt is normally lower than the cost of equity, so it will usually make more sense to borrow. [1]

There is also the ability to avoid the professional fees that would be involved in an application for a stock exchange listing. [1]

[Maximum 5]

[Total 5]

Commentary:
This question was answered well by many candidates. It was good to see candidates mention several of the points in the examiners' solution and managing to discuss these points clearly.

Q15

Disclosure will reassure the shareholders that the investment is in a viable product that can be expected to sell well. [1]

If U is evasive then the shareholders may be concerned that their money is being spent recklessly on a product that is unlikely to succeed. [1]

Informing the shareholders will also create a sense of transparency and so will help to create trust. [1]

There is a drawback to disclosure because U's competitors will be forewarned that a new product is under development. [1]

Informing the shareholders could lead to the competition being ready to launch a rival product sooner than would otherwise be possible. [1]

[Maximum 5]

[Total 5]

Commentary:
The answers to this question were a little vague. *Many candidates stated that not giving this information was against the accounting standards and Corporate Governance requirements, this is incorrect.* *Many candidates went on to make good points about transparency which was good to see.*

Q16

The directors should focus on the systematic risk because that is what will determine the impact on the shareholders' wealth. [1]

The required rate of return on the project will be determined using the project's beta coefficient. If the project has a positive net present value at that rate then the shareholders' wealth will increase. [1]

The project's beta will impact the company's beta, which will also impact the risk arising from the shareholders' diversified portfolios. [1]

The specific risk of a project is not particularly relevant to the shareholders because they can diversify that away. [1]

The shareholders would be unwilling to have the project evaluated on the basis of specific risk because that value is only relevant to stakeholders who cannot diversify, such as directors and employees who face the risk of losing their jobs if the specific risks push the company out of business. [1]

[Maximum 5]

[Total 5]

Commentary:
Candidates always find questions on this area of the syllabus difficult and this was no exception. Candidates were a little confused about the difference between systematic and specific risk. Very few candidates discussed beta.

Q17

Insurance companies' financial statements contain estimates of the liabilities associated with insured risks, some of which will not crystalise for several years into the future. [1]

In preparing financial statements, the companies must estimate the costs of servicing those policies and report those in the calculation of the profit for the year. [1]

A prudent approach is necessary because any understatement of the costs or liabilities could create a false sense of security on the part of the stakeholders. [1]

Overstating profits could lead to unrealistic demands for dividends, which could prove reckless if costs exceed expectations. [1]

It would be preferable to report the lowest reasonable estimate of profit and for any corrections to result in additional profit when the overprovision is resolved. [1]

[Maximum 5]

[Total 5]

Commentary:
This question was answered well by many candidates. Candidates showed a good understanding of insurance company accounts and managed to discuss prudence in the context of insurance company accounts.

Q18

An unmodified audit report indicates that a company's external auditor has completed all required audit work, has reviewed the financial statements and is satisfied that the statements present the company's performance and position fairly. [1]

Shareholders are reassured that the financial statements have been prepared in accordance with accounting standards and that the figures are not materially misstated. [1]

The figures are not necessarily free for error and there could be some debate about the suitability of accounting treatments, but the financial statements should be suitable for a review of stewardship. [1]

There is a limit to the extent to which a shareholder or other stakeholder might rely on the financial statements, even if the audit report is unmodified. [1]

For example, auditors test account balances using sampling techniques and so there is always some risk of sampling error in the process of audit testing. [1]

[Maximum 5]

[Total 5]

Commentary:
On the whole, this question was answered reasonably well. Many candidates understood what an unmodified report meant and were able to discuss the key issues. Very few candidates mentioned that auditors do not test 100% of the balances and few discussed that the accounts may not be 100% correct and free from error.

Q19

(i)

	Company S		Company T	
Gearing ratio	$\frac{70+40}{70+40+90+27}$	48% **[1]**	$\frac{60}{60+55+18}$	45% **[1]**
Interest cover	$\frac{52}{(70x10\%)+(40x5\%)}$	5.8 **[1]**	$\frac{34}{3}$	11.3 **[1]**
Current ratio	$\frac{20}{18-10}$	2.5 **[1]**	$\frac{16}{11-6}$	3.2 **[1]**

[6]

(ii)

The immediate impression created by these figures is that Company S has higher financial risk than Company T. [1]

Company S has slightly higher gearing, which could mean that any volatility in operating profit will be accentuated by the fixed amounts of interest and preference share capital. [1]

Company S has a lower interest cover, which means that finance charges take up a greater proportion of operating profit. [1]
Company S could be in greater danger of slipping into loss because of the lower cover. [1]
Company S has a lower current ratio, which suggests that it could be at greater risk of running into liquidity problems. [1]
Those comparisons could, however, be misleading. The fact that Company S has a significant amount of its finance from preference shares gives it greater flexibility in the event of financial difficulties. [1]
It would be undesirable to default on a preference dividend, but it is unlikely that the company would suffer any serious penalty if it did. That reduces the financial risks. [1]
The lower interest cover is also less problematic because of the use of preference shares. Company S's loan interest is covered 52/(40x5%) = 26 times. [1]
The fact that Company T rents its factory also creates an additional financial risk. That is partly because of the need to maintain the payment of rent. Any disruption to Company T's cash flows could put it in a difficult position. [1]
There is also the possibility that Company S owns property that could be used to guarantee loans. [1]
If the companies run into financial difficulty, then Company S can offer its lenders additional security over its buildings. [1]
The current ratio could be slightly misleading because of the natures of the current assets held by the two companies. [1]
Company S has a higher proportion of liquid assets in the form of trade receivables and cash. That will make it easier to ensure that current liabilities are paid on time. [1]
Overall, Company S probably has the lower financial risk, based on the fact that its gearing arises partly from preference shares and partly because of its ownership of property. [1]

[Marks available 14, Maximum 10]

(iii)
It could be argued that the definition of current liabilities might be misleading because it focusses on amounts due within one year. [1]
Companies may have current liabilities, including tax, that are not payable for several months and so they are not current. [1]
It could be argued that the tax liability should be managed as a separate issue. For example, Company S should forecast its cash flows and make arrangements to raise the $10m over the next few months. [1]
That might encourage more efficient management of current assets because the company has effectively set aside the $10m and is making very little real use of it while waiting for the tax charge to become payable. [1]

[Maximum 4]
[Total 20]

Commentary:
Part i was mixed, most candidates calculated the current ratio correctly, a reasonable number calculated interest cover correctly, but very few candidates calculated gearing correctly. Candidates struggled to use the correct formulae. *The answers to Part ii were not as good as expected. Some of the discussion was poor and the average mark for this question was slightly less than 5. Few candidates mentioned that company T rents its property and company S owns its property which would affect the risk. Few candidates discussed the nature of the current assets held by the companies. It is not enough to just say which company has higher or lower ratios and say whether that is good or bad, some reasonable discussion is required to score a high mark.* *Part iii was also poorer than expected the average mark was lower than 2. Candidates did not say much for this answer, they did not realise that taxation could take a while to pay and may not be a current liability.*

Q20

(i)

The movement of the share price will depend largely on how the stock market interprets the facts. It may have been known that the company had large cash reserves, perhaps because they appeared in the latest financial statements. [1]

In that case, the stock market would have expected the cash to be put to some use, ideally by investing in positive NPV projects. [1]

If the market is disappointed by the announcement, then the cash distribution will depress the market price. [1]

On the other hand, if the market had not expected management to be able to put these funds to good use then the share price might rise. [1]

If the market had been concerned that the directors were in danger of making a reckless investment just to put the cash to work quickly then the announcement will resolve that concern and the share price could increase. [1]

In the short term, the stock market might take some time to adjust to this announcement and so the share price might fluctuate. [1]

In the first instance, the share price might decrease while the market evaluates the news and then recover while the market considers the impact. [1]

[Maximum 7]

(ii)

Making an early announcement of the shop sale will avoid speculation, driven by rumours. [1]

It would be difficult to plan the sale of 20% of a quoted retailer's properties without knowledge of that plan leaking. [1]

If the plan is announced immediately then Z can clarify details of the plan, reducing the risk of damaging speculation in the press. [1]

Ideally, the company will be able to announce its plans for the staff whose shops will be closed. That may prevent avoidable resignations by employees who do not wish to risk being made redundant. [1]

Assisting in this way preserve the company's reputation, by demonstrating some interest in the needs of employees. [1]

An early announcement will also assist shareholders to plan ahead for the buyback. [1]

There could be tax implications that could be mitigated, at least to an extent, if the shareholders are warned well in advance. [1]

The shareholders can also plan ahead as to how best to invest the cash that they will receive from the buyback. [1]

[Maximum 8]

(iii)

Using the cash to pay a large dividend would result in shareholders suffering income tax on the cash received. [1]

A repurchase will constitute a partial disposal, and any gain will be subject to capital gains tax. [1]

That is likely to be less onerous, particularly for shareholders whose tax position makes capital gains preferable. [1]

Depending on the original cost of the shares, some shareholders might even make a capital loss on this "disposal" and so there will be no tax liability. [1]

The directors might also wish to ensure that this is viewed as a highly abnormal event. The use of an unusual form of distribution might help to signal that the company will not be making any similar disbursements in the foreseeable future. [1]

[Maximum 5]

[Total 20]

Commentary:
Part i was answered reasonably well. Candidates did write a lot and managed to pick up some marks for their discussion. Candidates were unsure whether the share price would rise or fall but did manage to make some reasonable arguments. *Part ii was also reasonable with candidates demonstrating some understanding of how a buyback would work and discussing many of the points in the examiner's solution.* *Part iii was not answered particularly well, with the average mark being lower than 2.5. However, some candidates did discuss that candidates might prefer to pay Capital Gains tax rather than Income tax, and raised some good points during that discussion.*

[Paper Total 100]

END OF EXAMINERS' REPORT

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