

# **INSTITUTE AND FACULTY OF ACTUARIES**

## **EXAMINATION**

20 April 2023 (am)

### **Subject CB1 – Business Finance Core Principles**

Time allowed: Three hours and twenty minutes

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

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



**1** Which of the following explains why companies have systems of internal control?

- A External auditors recommend controls.
- B Internal controls prevent board fraud.
- C Staff might make errors or commit fraud.
- D Stock exchange rules require controls.

[2]

**2** In what sense does the stock market serve as a performance monitor of a quoted company?

- A A stock market quotation requires compliance with rules.
- B Economic variables can have an impact on share prices.
- C The share price responds to management decisions.
- D The stock market requires detailed financial statements.

[2]

**3** Who should be responsible for the recruitment and appointment of a replacement if a quoted company's finance director resigns?

- A a committee of executive directors
- B a committee of non-executive directors
- C the chief executive officer
- D the non-executive chair

[2]

**4** A quoted company has appointed the same individual to serve as both chief executive officer and chair. Why is such an appointment often regarded as undesirable?

- A No one will be in charge of the board.
- B One person will have too much power.
- C The individual will be paid too much.
- D There will be insufficient illness cover.

[2]

**5** Peer-to-peer lending enables individuals to make loans through a peer-to-peer lending platform.

How are lenders' advances protected against default?

- A Lenders can take legal action in the event of default.
- B Lenders' investments are spread across multiple loans.
- C Peer-to-peer platforms guarantee against default.
- D Peer-to-peer platforms require security from borrowers.

[2]



**6** Which of the following explains why tax law often makes a taxpayer's main private residence free from capital gains tax?

- A taxpayers would refuse to pay
- B in order to encourage home ownership
- C not all taxpayers are homeowners
- D the tax could easily be avoided by renting

[2]

**7** A company undertaking a major construction project has insured against the risk of accidental injury to construction workers. Which type of risk management does the insurance policy involve?

- A risk acceptance
- B risk avoidance
- C risk reduction
- D risk transfer

[2]

**8** Insurance company financial statements require premiums received in respect of future liabilities to be identified and held until the liabilities have expired. Which accounting concept does this reflect?

- A dual aspect
- B going concern
- C matching
- D money measurement

[2]

**9** The net asset value per share is calculated using the formula:

$$\frac{\text{Ordinary shareholders' equity} - \text{intangible assets}}{\text{Number of issued ordinary shares}}$$

Which of the following explains why intangible assets are subtracted in the numerator?

- A Intangible assets are generally funded by debt and not equity.
- B Intangible assets are not physical and cannot be touched.
- C Intangible assets are not used to generate operating profit.
- D Intangible assets are unlikely to have value if the company fails.

[2]



**10** Which of the following describes creative accounting?

- A Figures are biased without breaking the rules.
- B Financial statements are based on lies.
- C Innovative accounting rules clarify performance.
- D New rules are created by lobbying regulators.

[2]

**11** The board of a company has asked an actuary to estimate the value of a liability that will appear in the company's financial statements. The actuary has been asked to ensure that the liability remains below \$80 million, otherwise the company will suffer severe penalties.

Explain the ethical issues arising from this assignment.

[5]

**12** M is an unquoted company with 20 shareholders, none of whom take an active interest in its management. M usually pays an annual dividend that increases in response to inflation. M's board is concerned that the company cannot afford to pay the expected dividend this year because an important piece of manufacturing equipment is due for replacement.

Explain the impact of suspending the dividend in order to fund the replacement, paying particular attention to the fact that M is unquoted.

[5]

**13** A quoted company, Q, has identified a takeover target in a completely different industry. Q's board believes that the market has under-priced the target company's shares.

Explain whether it would make sense for Q to proceed with this acquisition.

[5]

**14** Explain why it is necessary for the Global Reporting Initiative to set standards for sustainability reporting.

[5]

**15** An insurance company must account for a substantial estimated liability associated with a recent claim.

Describe the respective responsibilities of the company's directors and its external auditor with regard to accounting for this liability.

[5]

**16** Describe the importance to the shareholders of the notes to the financial statements in a quoted company's annual report.

[5]





- 17** An investment analyst wishes to compare the profitability of two airlines that have very different returns on capital employed (ROCE).

Explain why it would be helpful for the analyst to evaluate the components of the ratio as follows:

$$\text{ROCE} = \text{asset utilisation ratio} \times \text{profit margin}.$$

[5]

- 18** An actuarial consultancy has a budgetary control system that its managing partner claims combines the best aspects of both the top down and bottom up approaches.

Explain why a consultancy would wish to combine these two approaches to setting budgets.

[5]

- 19** The information provided below has been obtained from R's draft financial statements, which have not yet been finalised.

**R**

**Statement of changes in equity  
for the year ended 30 June 2022**

	<b>Share capital</b>	<b>Retained earnings</b>	<b>Total</b>
	<i>\$000</i>	<i>\$000</i>	<i>\$000</i>
Opening balance	1,000	480	1,480
Loss for year		(211)	(211)
Closing balance	1,000	269	1,269

**R**

**Statement of financial position  
as at 30 June**

	<b>2022</b>	<b>2021</b>
	<i>\$000</i>	<i>\$000</i>
Property, plant and equipment	1,864	2,078
Current assets	60	49
	1,924	2,127
Share capital	1,000	1,000
Retained earnings	269	480
Total equity	1,269	1,480
Non-current liability	600	600
Current liabilities	55	47
	1,924	2,127



R is an unquoted company.

The non-current liability is a loan that falls due in seven years. However, there is a restrictive covenant on the loan entitling the lender to seek immediate repayment if the gearing ratio, calculated as  $\text{debt}/(\text{debt} + \text{equity})$ , ever exceeds 30%. R's board is concerned because this ratio has increased from 29% last year to 32%, which breaches the covenant.

R's property, plant and equipment include a large office building in the business district of a major city. The building was purchased 12 years ago for \$1,100,000 and has never been revalued. The building has been depreciated at 2% of cost each year since its acquisition. The board is considering revaluing the office in order to reduce the gearing ratio.

- (i) Calculate the value that would have to be attached to the office building to reduce R's gearing to 30% as at 30 June 2022. [4]
  - (ii) Explain whether it would be acceptable to revalue the office building in order to reduce the gearing ratio to less than 30%. [5]
  - (iii) Explain how R's board should manage the breached debt covenant, assuming that the office building is not revalued. [6]
  - (iv) Explain the implications for R's shareholders of continuing reported losses. [5]
- [Total 20]



T is a truck manufacturer whose board is considering the development of an electrically powered delivery truck for use in cities. The truck will be designed to operate quietly and efficiently on city streets, with none of the emissions associated with diesel-powered vehicles.

T paid \$600 million for the patent rights to use a new type of battery. The shareholders are aware of that investment because it was capitalised as an intangible asset in the most recent published financial statements. No other information has been released.

The next step will be a one-year feasibility study into the remaining technical challenges of developing and manufacturing the truck and the potential demand from customers. The feasibility study will cost \$250 million. If the study's results are disappointing, then the development of the truck will be abandoned and the cost of the patent written off. If the results are satisfactory then T will pay \$4 billion to buy and equip a factory over a four-year period to bring the truck to market at that time. The net present value of that final stage has been estimated at between minus \$2 billion and plus \$10 billion, although that figure is subject to confirmation by the feasibility study. None of this information has been announced by the board. T's current market capitalisation is \$40 billion.

T has a substantial cash balance that is presently deposited in a bank account that pays almost no interest. The board may use some of that balance to pay for the feasibility study. The \$4 billion will require a loan or an injection of equity.

- (i) Discuss, with reference to agency theory, the implications of maintaining secrecy over the feasibility study and prospective investment in launching the truck. [7]
- (ii) Discuss the argument that the decision to proceed with the feasibility study and the subsequent investment in making and launching the truck should be evaluated as a single project. [7]
- (iii) Evaluate the argument that the cost of funding the feasibility study would be close to zero because it would use an existing cash balance. [6]

[Total 20]

**END OF PAPER**





Institute  
and Faculty  
of Actuaries

# EXAMINERS' REPORT

**CB1 - Business Finance**

**Core Principles**





## **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 answering an examination using open books and online. The Examiners expect all candidates to have a good level of knowledge and understanding of the topics and therefore candidates should not be overly dependent on open book materials. In our experience, candidates that spend too long researching answers in their materials will not be successful either because of time management issues or because they do not properly answer the questions.

Many candidates rely on past exam papers and examiner reports. 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 text book 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  
July 2023



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

The aim of the Finance and Financial Reporting 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.

This paper examines basic finance including raising funds by a variety of methods, taxation, basic management accounting, 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.

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 not be awarded marks where excessive rounding has been used or where insufficient working is shown.

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

Many candidates performed well in this exam. The MCQs were done very well and the short response questions were reasonable, some were answered very well and others, usually where application was required, were answered less well. Performance in Questions 19 and 20 were mixed with some very good answers and some weak ones. The questions on Financial Reporting were a little weak on this occasion.

The area which candidates' performance was lower was finance, this is often the case with this exam. Candidates should ensure a sound knowledge of finance and be able to apply their knowledge to scenarios. Either question 19 or 20 will be on this area of the syllabus in every exam.

Candidates were good at questions which mainly tested knowledge but performance was not so good on the application of knowledge to scenarios.

**C. Pass Mark**

The Pass Mark for this exam was 57  
1080 presented themselves and 671 passed.



## Solutions for Subject CB1 - April 2023

<b>Q1</b>	C	[2]
<b>Q2</b>	C	[2]
<b>Q3</b>	B	[2]
<b>Q4</b>	B	[2]
<b>Q5</b>	B	[2]
<b>Q6</b>	B	[2]
<b>Q7</b>	D	[2]
<b>Q8</b>	C	[2]
<b>Q9</b>	D	[2]
<b>Q10</b>	A	[2]

*Performance in Questions 1-10 was very good. More candidates than usual scored full marks.*

### Q11

The actuary has a personal duty to tell the truth regardless of the incentives and pressures that would encourage lying [1]

The actuary also has a professional duty that is associated with representing a professional body whose members are entrusted with important responsibilities [1]

The actuary should refuse this assignment unless it can be established that the liability will be determined in accordance with best professional practice and that the result will be reported honestly [1]

Failure to enforce such a condition will threaten the credibility of the actuarial profession [1]

It could be argued that the people who commissioned the valuation on that basis have acted unprofessionally [1]

Rather than seeking an objective assessment of the value of the liability, they have asked the actuary to justify a predetermined valuation in the hope of escaping a penalty. Presumably that would lead to a stakeholder being misled and abused [1]

[Marks available 6, maximum 5]

*This question was not answered very well. There were some very good answers but, overall, this was not answered very well. A number of candidates just blamed the valuer and the company when the actuary must shoulder some responsibility as well.*

### Q12

M's shareholders are likely to be concerned by this change in the dividend policy [1]

The annual dividend has been sending a clear signal of stability and prosperity and that will have created confidence in the directors [1]



It is possible that the shareholders will consider meeting and replacing the Board, although that would simply mean replacing a known management team that has delivered consistent performance in the past with unknown replacements [1]

The Board should ensure that the shareholders are fully briefed on the reasons for the suspension of the dividend and that it is made clear that the alternative would have been to have raised debt [1]

The fact that the company is unquoted means that it would be difficult for the shareholders to respond by selling their shares and there is no observable share price in any case to signal that disquiet [1]

It may be that some shareholders who can afford to will be prepared to buy from other shareholders who misunderstand the situation or who were relying on the dividend [1]

[Marks available 6, maximum 5]

*This question received mixed answers. Many candidates did not realise that unquoted companies do not have an easily available market for their shares. Well prepared candidates delivered very good answers.*

### Q13

The fact that the potential bidder regards the target as undervalued is a concern because that is unlikely to persist once the bid is announced [1]

The bid will draw attention to the target and might encourage other market participants to buy shares in the event that it becomes obvious that they are undervalued [1]

In all probability, the market will correct any undervaluation very quickly and will eliminate the bidder's motive for buying [1]

There is also the fact that share prices always increase when it is rumoured that there is a potential takeover bid because market participants will have good reason to believe that the bidder will be prepared to pay a premium in order to acquire a controlling interest [1]

The fact that the companies are in different industries suggests that there is no logical commercial reason for the acquisition [1]

If the bidder is unable to acquire the target for less than the company is worth then there is unlikely to be any synergy to justify the acquisition and so the shareholders will lose value [1]

[Marks available 6, maximum 5]

*This question was not as well answered as most other questions, with several candidates not attempting the question. Only well prepare candidates mentioned that the undervaluation could be a problem and many saw it as a positive and discussed it as if it was a bargain.*

### Q14





- Sustainability reporting shares many of the traits associated with conventional financial reporting, in particular that the content of reports and the definitions of the matters being reported are open to interpretation and manipulation [1]
- Companies require the active support of customers to buy goods and regulators to provide a licence to operate [1]
- Offering credible sustainability reports reduces the likelihood that key stakeholders will withdraw their support. That aspect creates an incentive to publish incomplete or misleading reports [1]
- GRI standards provide a benchmark against which to evaluate sustainability reports, thereby enabling stakeholders to be confident in them [1]
- Recommending broad disclosure requirements will make any omissions stand out and so highlight the fact that a company may have been guilty of excluding damaging information from the report [1]
- Setting out definitions and the characteristics of sound sustainability reporting provides auditors and other reviewers to measure the quality of the disclosures in the sustainability reports [1]

[Marks available 6, maximum 5]

*This question was done well by many candidates.*

### Q15

- The directors are responsible for ensuring that the financial statements present fairly (or give a true and fair view) [1]
- In this case, that will require the directors to ensure that the estimated liability is calculated as accurately as possible, using all relevant information and applying relevant models to the calculation [1]
- The Board should report the uncertainty concerning this estimate in the notes to the financial statements so that the shareholders can fully understand the possibility of a material misstatement [1]
- The external auditor's responsibility relates to the financial statements as a whole and not to the specific figures within the statements. The auditor must form an opinion on fair presentation [1]
- The auditor should evaluate whether the potential misstatement of the liability could be material, in which case there will be uncertainty about the fair presentation of the statements [1]
- The auditor could almost certainly deal with the matter by means of an emphasis of matter paragraph that draws the shareholders' attention to the note concerning the uncertainty [1]

[Marks available 6, maximum 5]

*This question was answered well by most candidates.*

### Q16

The notes to the financial statements provide the shareholders with additional



information that can be used to supplement the figures in the financial statements themselves [1]

For example, the note relating to property, plant and equipment will enable the shareholders to obtain a better understanding of the book value figure provided in the statement of financial position [1]

The notes also provide disclosures that might not appear in the financial statements, such as disclosures of contingent liabilities or the directors' remuneration [1]

The notes also provide detailed insights into the manner in which the figures in the financial statements have been prepared [1]

The statement of accounting policies and the detailed calculation in other notes enables the shareholders to develop a better insight into the approach being taken and whether the figures might be regarded as conservative or optimistic [1]

Such insights help with comparisons between companies even if they are in the same industries [1]

[Marks available 6, maximum 5]

*Answers to this question were mixed. Some candidates chose to write about one or two notes to the accounts and others discussed notes in general which was the best approach. Many candidates scored high marks. A few candidates did not know what notes to the accounts which was worrying.*

### Q17

Return on capital employed is an important profitability ratio, but it is particularly important in analysing capital-intensive businesses, such as airlines [1]

The asset utilisation ratio enables shareholders and other interested parties to consider the possibility that the airline with the higher ROCE could be better at using assets efficiently and effectively in order to generate revenue [1]

That could be due to better scheduling of flights so that aircraft can spend more time in the air or can be used on more popular routes that yield higher fares [1]

Alternatively, the profit margin offers an insight into whether revenues and operating costs are being managed so that a higher percentage of revenue is being preserved and reported as profit [1]

Airlines can differ in that regard, with some offering "low-cost" services that are sold more cheaply while others offer greater comfort in return for higher fares [1]

*Candidates answered this question well which was very good to see.*

### Q18

Realistic targets are the key to effective budgeting. Too slack and the budget holders will have little incentive to perform well, but they will be demotivated if the budgets are too demanding [1]



Generally, top down budgets are likely to be demanding, which minimises the risk of budget slack but could create the risk that senior management is asking for too much, which bottom up budgeting can have the opposite effect [1]

One possible solution to the challenge of setting motivating but achievable budgets would be to offer some interaction between the senior management team and the budget holders [1]

The starting point would for senior management to set some initial targets, that could be broken down between departments and communicated to junior management [1]

Junior management could then offer their opinions and advice on whether the Budgets are achievable and whether there might be some alternatives that would be more efficient [1]

Ideally, there could be a meaningful dialogue that would enhance the overall effectiveness of the budgets. The danger is that it could be even more demotivating if the feedback from junior management is disregarded [1]

[Marks available 6, maximum 5]

*There were some very good answers to this question. On the whole candidates scored well.*

## Q19

(i)

$$\text{debt}/(\text{debt} + \text{equity}) = 30\%$$

$$600/(600 + \text{equity}) = 30\%$$

$$600 = 180 + 30\% \text{ equity}$$

$$\text{Equity} = 1,400 \quad [1]$$

The revaluation reserve will have to increase equity from 1,269 to 1,400, so the revaluation adjustment will have to be 131 [1]

The book value is presently  $1,100 - (12 \times 22) = 836$  [1]

The revalued amount will be  $836 + 131 = 967$  [1]

(ii)

The question of whether the office building should be shown at cost less depreciation or its revalued amount is really an accounting choice [1]

The Board is free to choose whichever method is most appropriate, although the motive should be to ensure that the financial statements present fairly [1]

If the Board wishes to revalue the office building, then it should do so on the basis that the valuation will reflect the fair value of the building, basically its expected selling price [1]

It would be unacceptable to determine the valuation using the arithmetic in (i) above because that is unlikely to be an accurate estimate of the market value of the asset [1]

The Board should start by seeking expert advice on the value of the building, using property experts with local knowledge of that market [1]

If the value happens to exceed \$967,000 then the financial statements will present fairly and the debt covenant will be satisfied if that figure is used [1]

[Marks available 6, maximum 5]



(iii)

R's Board should start by establishing whether the company is in financial difficulties that will result in it being unable to service the loan [1]

If R is in serious financial difficulties, then the responsible thing to do would be to act in accordance with the debt covenant and inform the lender, with a view to having the company wound up [1]

The alternative would be to carry on trading which would be unethical because the lender's funds would be put at risk [1]

The directors could also damage their own personal reputations by behaving in a manner that is clearly unethical [1]

If the Board can see an effective response to the problems that R is facing then the first priority would be to develop that planned response quickly so that it can be shared with the lender [1]

The Board should then approach the lender as a matter of urgency and should explain that the company will be in a technical breach of its covenant when the financial statements are published [1]

The Board should then negotiate with the lender so that it has the necessary time and freedom to implement its survival plan. Such a response would be desirable to the lender because it would avoid the need to incur the cost and inconvenience of a foreclosure action [1]

[Marks available 7, maximum 6]

(iv)

R's retained earnings figure will decrease every time the company reports losses. That will restrict the company's ability to pay dividends because it cannot pay dividends that exceed retained earnings [1]

The problem with the continuing losses will lead to a recurrence of the difficulties arising from the debt covenant [1]

The value of R's equity will decline because of these continuing losses, which will reduce shareholder wealth [1]

The share price is not visible because the company is unquoted, but that does not alter the fact that potential buyers will be unwilling to pay a great deal for shares in a company that is reporting losses [1]

Ultimately, the accounting losses will bleed the company of cash and it will be forced out of business [1]

The losses mean that costs exceed revenues. Even though costs are not always reflected by cash payments, higher costs will generally mean higher cash outflows [1]

[Marks available 6, maximum 5]

**[Total 20]**





*The calculation should have been straightforward, and many candidates scored well on part i.*

*Part ii seemed to cause some candidates problems and answers were very varied as to whether the company should revalue the buildings or not. Marks were awarded for a discussion of the issue and many candidates managed to gain reasonable marks. Questions on Financial Reporting are in every exam and are often not answered well so it is worth revising this area of the syllabus.*

*Part iii was answered well by most candidates with candidates giving good responses as to the approach the company could make to its lender. Candidates demonstrated a good understanding of debt covenants.*

*Part iv was also answered quite well. Most candidates gave good answers on why making losses for a long period would cause serious problems.*

## Q20

(i)

The shareholders are being asked to place a great deal of trust in T's Board [1]

The initial and unexplained investment of \$600 million seems likely to stretch the shareholders' patience, especially when it will soon be followed by a further \$250 million investment [1]

The shareholders might not be convinced that the Board's is withholding information in order to protect commercial secrecy and so the share price might start to decline [1]

That could put the Board in a position where the directors decide to breach confidence in order to protect their jobs and their reputations [1]

Past governance scandals have generally involved shareholders being misled by boards and transparency has emerged as one of the ways in which the markets can be protected from dishonest directors [1]

From an agency point of view, T's Board should ensure that the shareholders have an adequate understanding of the strategy that is being pursued and the manner in which their wealth is being invested [1]

It is unacceptable to withhold information concerning investments on this scale and with this level of impact on the product range [1]

The Board should recognise that competitors will be aware that a major investment has been made and so the shareholders will not necessarily benefit from withholding any information [1]

[Marks available 8, maximum 7]

(ii)

The feasibility study and the subsequent investment should be considered together in the first instance because there will be little or no point in proceeding with the feasibility study unless the truck will go into production [1]

This is complicated by the fact that the best estimate of the investment in production covers a range of possible outcomes, including losses [1]



The Board cannot necessarily tell whether it will proceed with the launch of the product even if the \$250 million is spent, which raises doubts about the benefits from the feasibility study [1]

At this stage of the project, the Board was sufficiently confident to invest \$600 million in a patent, which suggests that there is reasonable confidence in a successful outcome overall [1]

Arguably, the Board should view the feasibility study as a separate investment that is being undertaken to reduce the risk of a failed investment at the implementation stage [1]

Knowing that the truck can be manufactured and that there will be sufficient demand will enable the Board to make a better informed decision concerning the production of the vehicle [1]

The feasibility study would appear to be a potential investment in the acquisition of knowledge and that knowledge may enable the creation of a substantial new product line [1]

Once the study has been completed, it will be a sunk cost that has no further relevance to the decision to manufacture and so that will become a separate decision [1]

[Marks available 8, maximum 7]

(iii)

The fact that the company has a large cash balance available does not mean that the cost of using that cash is zero [1]

The cash is an asset and, like all assets, its acquisition was funded by equity, debt or a combination of the two [1]

It could be argued that the cost of capital associated with using the cash should be based on T's WACC unless it can be shown to have been raised specifically from either debt or equity [1]

Alternatively, if the cash would otherwise be used to repay debt then the financing cost associated with that cash would be the cost of debt [1]

The shareholders might also view the cash as being funded through their investment in equity and so might expect the Board to put the funds to good use and to seek a return based on the cost of equity [1]

There will also be opportunity costs associated with spending that cash on the feasibility study because it might be used to finance alternative investment projects [1]

Presumably there are other ways in which the \$250 million could be invested and those opportunities will be lost to the company [1]

[Marks available 7, maximum 6]

**[Total 20]**

*This question was problematic for several candidates. However, some candidates made a very good attempt at all three parts of this question.*

*The first part was problematic as some candidates found difficult to think whether it was acceptable for a Board to keep secrets from shareholders.*

*Part ii also caused some problems; marks were awarded for good arguments, and it would not matter whether a candidate said the study should be treated separately or not they would still gain marks.*



*Part iii was also not answered very well, many candidates agreed that the cost of cash was zero which is incorrect. There is a cost to using cash for the investment, some candidates gave good answers by discussing opportunity cost which was very good.*

**[Paper Total 100]**

**END OF EXAMINERS' REPORT**





Institute  
and Faculty  
of Actuaries

### **Beijing**

14F China World Office 1 · 1 Jianwai Avenue · Beijing · China 100004  
Tel: +86 (10) 6535 0248

### **Edinburgh**

Level 2 · Exchange Crescent · 7 Conference Square · Edinburgh · EH3 8RA  
Tel: +44 (0) 131 240 1300

### **Hong Kong**

1803 Tower One · Lippo Centre · 89 Queensway · Hong Kong  
Tel: +852 2147 9418

### **London (registered office)**

7<sup>th</sup> Floor · Holborn Gate · 326-330 High Holborn · London · WC1V 7PP  
Tel: +44 (0) 20 7632 2100

### **Oxford**

1st Floor · Belsyre Court · 57 Woodstock Road · Oxford · OX2 6HJ  
Tel: +44 (0) 1865 268 200

### **Singapore**

5 Shenton Way · UIC Building · #10-01 · Singapore 068808  
Tel: +65 8778 1784

