# INSTITUTE AND FACULTY OF ACTUARIES

# EXAMINERS' REPORT

September 2021

## 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.

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
December 2021

 

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

The aim of the Business Finance 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, 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. There is now some management accounting in the syllabus so there are questions on topics such as budgeting and performance management.

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.*

Performance was reasonable for many candidates. Many of the questions were answered very well but a number of candidates appeared to be inadequately prepared, in terms of not having covered sufficiently the entire breadth of the subject. The MCQ questions were answered very well with high marks being achieved by many candidates. Some of the short questions were answered well but some candidates did not answer what was asked, most notably in Question 12, Question 19 and Question 20.

Questions corresponding to parts of the syllabus that are not frequently examined were generally poorly answered (e.g. Q19 and part (ii) and (iii) of Q20). This highlights the need for candidates to cover the whole syllabus when they revise for the exam and not only rely on themes appearing in past papers.

## C. Pass Mark

The Pass Mark for this exam was 54
1015 presented themselves and 567 passed.

## Solutions for Subject CB1 - September 2021

| | | |
|---|---|---|
| **Q1** | B | [2] |
| **Q2** | A | [2] |
| **Q3** | A | [2] |
| **Q4** | B | [2] |
| **Q5** | B | [2] |
| **Q6** | D | [2] |
| **Q7** | A | [2] |

 

**Q8** D [2]
**Q9** A [2]
**Q10** D [2]

*Questions 1-10 were answered well by many candidates.*

**Q11**
The share price reflects shareholder wealth. If the share price decreases then the shareholders suffer a loss of value [1]
The shareholders could view the decrease as a sign that the directors have failed in their duty to maximise shareholder wealth [1]
The directors cannot necessarily be expected to maintain the share price in all circumstances and so they may not be responsible for any decrease [1]
Companies can suffer because changing consumer tastes affect demand or economic events affect cash flows, none of which could be prevented [1]
The directors are unlikely to hold significant amounts of shares, so there will be no direct loss if the share price decreases [1]
They could, however, be rewarded with share options or other forms of remuneration that reflect share prices [1]
[Marks available 6, maximum 5]

*This question was answered well by many candidates, however some candidates did not address the question of the directors and only discussed share price.*

**Q12**
If the directors plan to make a rights issue then there will be a dilution effect that will reduce the share price in line with the increase in shares, offset by the injection of funds [1]
The theoretical weighted average price can be calculated on the basis of the present share price, adjusted for the effects of the rights issue itself [1]
The theoretical price assumes that the dilution effect is the only factor that will affect share prices after the rights issue [1]
The share price reflects the market's expectations of future cash flows. A rights issue usually involves raising funds for a purpose, such as raising equity finance for a project [1]
If the market believes that the investment has a negative net present value then there will be a loss of value that will further reduce the share price [1]
Presumably, the directors believe that the project has a positive net present value, but that does not mean that the market will necessarily agree with that view and so the share price could decrease [1]
[Marks available 6, maximum 5]

*This question was not answered well by candidates. Many candidates used information from the study text and other sources to answer this question and did not answer what was asked.*

 

**Q13**

It may be difficult to evaluate post acquisition synergies because the bidding company will have limited access to the target company's records, if any [1]
The directors of the target company may wish to resist the acquisition and could refuse to grant any access to information that would assist the bidders [1]
For example, integrating IT systems can prove difficult and it may be difficult to tell whether there will be a problem without first having access to the target's IT staff [1]
Synergies may prove difficult to obtain in practice if the managers at the target company choose to resist, even after acquisition [1]
For example, the synergies might require a reduction in staffing, but the target company staff might act to keep as many jobs as possible [1]
Even though the target company is owned and controlled, its staff may be able to undermine any attempts to introduce operating efficiencies [1]

[Marks available 6, maximum 5]

*This question was answered well by many candidates.*

**Q14**

The EBITDA figure is a reasonable approximation to the figure for cash from operations [1]
That figure will be of value in helping analysts track historical cash flows with a view to understanding past volatility [1]
It could be argued, though, that there is very little need to calculate EBITDA because the cash flow statement will give a more detailed breakdown of cash flows, including cash from operations [1]
The EBITDA figure has the advantage of reflecting operating profit without any allowance for subjective estimates such as depreciation and amortisation [1]
The figure comprises operating activities that are reflected by transactions and so they are less subject to distortion by manipulation of estimates and should be more readily comparable between companies in the same industry [1]
EBITDA does, however, ignore important costs, such as depreciation, and so it could overstate performance [1]

[Marks available 6, maximum 5]

*In general this question was answered well.*

**Q15**

If companies are required to report on their social responsibility then they may respond by modifying their behaviour in response in order to maintain and enhance their reputations [1]
The directors will be aware that customers might be reluctant to buy products made and sold by companies that behave in an unsustainable manner [1]
The shareholders may also be reluctant to own shares in companies that are operating in a manner that is harmful to the environment [1]
Any such pressure will, however, be offset by the fact that the board's primary duty is to maximise shareholder wealth [1]

 

The shareholders may wish to encourage companies to avoid major excesses in terms of irresponsible behaviour, but there is a limit to the extent to which they will tolerate reduced dividends in order to achieve that [1]

Social responsibility cannot be measured and evaluated to the same extent as cash flows from operations and so there is a limit to how much impact this will have on behaviour [1]

[Marks available 6, maximum 5]

*This question was not answered very well. Most candidates scored some marks for discussing sustainability but few answered the question asked. Some candidates were able to show understanding of the problems of sustainability and the link to share price.*

**Q16**

There have been cases such as this in the past and they have been labelled "accounting scandals" [1]

In general, they have had a significant impact on the credibility of financial reporting and the regulators who are responsible for it [1]

The fact that the misleading financial statements do not breach the rules suggests incompetence on the part of standard setters [1]

These cases also highlight the extent to which the subjects of accounting regulation are prepared to go in order to manipulate their reported results [1]

The fact that accounting standards are studied closely with a view to finding loopholes indicates that standard setters must think ahead and take much greater care in setting standards that leave very little scope for interpretation [1]

Paradoxically, the need to prevent such behaviour could lead to standards that are more prescriptive and that leave less room for the application of professional judgement [1]

[Marks available 6, maximum 5]

*Some candidates answered this quite well, others found this question difficult.*

**Q17**

A short working capital cycle generally implies that fewer net assets are tied up in working capital [1]

That is desirable because working capital does not offer any return, so funds are being invested in a manner that generates no reward [1]

The working capital cycle can be shortened in two basic ways, by speeding up the liquidation of current assets and the slowing down of settlement of trade payables [1]

Cash management generally requires that attention should be paid to those balances in any case [1]

There can be risks attached to a very short working capital cycle because companies can lose business if they press receivables too hard for faster payment or lose sales if they have insufficient inventory to meet demand [1]

They can also lose trade credit if they delay payments to suppliers for too long [1]

[Marks available 6, maximum 5]

 

*This question was answered very well by most candidates.*

**Q18**

This approach to budgeting avoids the dilemma that setting specific targets can lead to dysfunctional behaviour [1]

The new system will overcome the natural resistance of shop managers to agree to work towards targets that are perceived as testing and so there could be a need to invest senior management time in imposing the targets [1]

There will also be less scope for the manipulation of revenues, such as putting less effort into sales once the target has been met because the target could be increased even further if a shop has a good period [1]

The new system will effectively put the different shops and their managers in competition with one another [1]

There will be no incentive to slack or to debate performance because the targets are essentially being set by other shops in the chain [1]

This could, however, put the shop managers under a great deal of stress, which might damage efficiency if they are struggling to break out of the bottom part of the table [1]

[Marks available 6, maximum 5]

*This question was answered well with many candidates discussing "beyond budgeting".*

**Q19**

(i)

The purpose of depreciation is to recognise that items of property, plant and equipment have finite useful lives [1]

It is, therefore, appropriate to write off their book values by depreciating them in order to recognise that their lives have been partly consumed [1]

Depreciation is about recognising an expense in the statement of profit or loss rather than correcting the value in the statement of financial position [1]

The increase in the value of the buildings is a medium term phenomenon that will reverse eventually when the buildings reach the ends of their useful lives [1]

The buildings will eventually deteriorate and will have a value of zero regardless of how the property market moves in the shorter term [1]

Buildings are generally depreciated at a low rate, possibly 2% of cost, to reflect the fact that they may have lives of up to 50 years [1]

The need to depreciate buildings has been debated and resolved by the accountancy profession [1]

There is an accounting standard that requires all tangible non-current assets with finite lives to be depreciated [1]

The directors cannot, therefore, decide independently that they disagree with that logic because there are rules in place to ensure consistency [1]

[Marks available 9, maximum 7]

(ii)

 

The external auditor is required to form an opinion on the truth and fairness of the financial statements and to express that opinion in the audit report that is attached to the financial statements [1]
As part of that duty, the auditor must review the accounting policies being applied by the directors to ensure that they are consistent with standards and with good accounting practice [1]
In this case, the depreciation policy is unacceptable and the auditor will have to decide whether that leads to a material misstatement of the reported figures [1]
If the failure to depreciate does lead to a material misstatement then the first thing that the external auditor should do is meet with the directors to explain that there is a problem [1]
Ideally, the auditor will be able to persuade the directors to change their decision, in which case the buildings will be depreciated and the problem will be resolved [1]
If the auditor cannot persuade the directors to change then the next step would be to warn them that the auditor will have both a legal and professional duty to bring these problems to the attention of the shareholders [1]
The auditor will have to insist on a modified audit opinion [1]
The failure to depreciate the buildings will overstate profit and asset values by a material amount and so the auditor will have to make it clear that there is a disagreement over the accounting treatment [1]
The audit report will state that the financial statements give a true and fair view "except for" the omission of depreciation [1]

[Marks available 9, maximum 7]

(iii)
The revaluation will increase the book value of the buildings, which will increase the amount that has to be written off over their useful lives [1]
The annual depreciation charge is likely to increase, thereby reducing profit [1]
The only way to avoid that would be to review the estimated useful lives of the buildings with a view to extending the life and so offsetting some of the increase in depreciation by dividing a larger book value by a larger life [1]
The performance will also be impacted by the fact that the revaluation will increase the revaluation reserve balance [1]
That means that capital employed is larger and so return on capital employed will be reduced [1]
Thus, the profit figure is likely to be smaller in absolute terms and will almost certainly be smaller in relation to the resources that have been invested [1]

**[Total 20]**

*This question was not answered well. Candidates struggled with part (i) and few candidates were able to say in any depth why buildings should be depreciated.*

*Part (ii) was not answered well, many candidates wrote everything from the study text and other sources on different types of audit reports which did not answer the question asked. Many candidates relied on rote learning and did not apply their knowledge to the question asked. Some candidates gave excellent answers to this question.*

*Answers to part (iii) represented an improvement relative to part (ii), but few candidates* *answered well, again this was mainly due to a reliance on rote learning which meant candidates did not answer what was asked.*

*Those who answered well understood that depreciation would increase after the revaluation and were able to discuss the changes in return on capital employed very well.*

**Q20**

(i)

Beta is calculated on the basis of the apparent sensitivity of returns on this company's shares to changes in returns on the market portfolio [1]

That ensures that the beta calculation is based on objective observations and can be taken over a significant period of time [1]

The basis on which beta is calculated is well established [1]

The drawback with the use of historical data is that there is no reason to believe that beta will remain unchanged over time [1]

The economic factors that drive the capital markets might change. The company itself might also be managed differently or be affected by a change in circumstances [1]

For example, oil prices might become less volatile, which could have an impact on the market portfolio, but could also have a significant impact on the relative volatility of, say, an airline that uses a great deal of oil [1]

The danger is that beta is generally used in forward-looking decisions about investing or retaining investments [1]

If the beta coefficient is based on outdated observations then the decisions will be badly informed and so the wrong decision may be made [1]

In this case, the decision that is being made is a long-term investment in a factory, so the cost of unwinding an incorrect decision will be significant [1]

[Marks available 9, maximum 7]

(ii)

The new factory would increase absolute volatility if the underlying business is highly volatile and risky [1]

The company presently manufactures mobile phones, which are a relatively well established and mature product and so demand should be relatively steady [1]

The new factory will make a completely new product range that may have extremely volatile demand [1]

This is a product that has not yet been proven and so demand could fluctuate significantly, perhaps being affected by reviews or concerns about product safety [1]

It is also possible that competing products will emerge that will rob the product of revenue, so the greater volatility may not be entirely within the company's control [1]

The risks associated with the new product may be largely unsystematic risks, which means that they can be diversified away [1]

If that leaves only a small residue of systematic risk then the investment will have a small beta [1]

The overall beta for the expanded company will be the weighted average of the betas for the existing company plus that of the new business [1]

That means that the overall beta will decrease provided the gym equipment business has a beta of less than 1.3 [1]

 

[Marks available 9, maximum 7]

(iii)
Gearing generally increases systematic risk, which means that the use of debt will increase beta [1]
That can be demonstrated by calculating the geared and ungeared betas for the company [1]
The ungeared beta is basically the beta arising from the systematic risks associated with the business activities [1]
The geared beta increases that figure to take the effect of gearing for systematic risk into account [1]
The geared beta is calculated by multiplying the ungeared beta by the figure (1 + debt:equity*(1-tax rate)) [1]
That value is greater than 1, so the geared beta will always be greater than the ungeared [1]
One way to think about geared beta is that the borrowing will make the company's exposure to changes in economic variables even greater and so it should increase beta [1]

[Marks available 7, maximum 6]

**[Total 20]**

*Candidates found all parts of this question difficult. Candidates dealt with part (i) best but most answers were very generic. A number of candidates demonstrated a very good understanding of Beta.*

*Part (ii) candidates did not apply their knowledge to the scenario. Many candidates could not apply their knowledge of beta to a scenario however, some candidates did show they understood diversification and Beta very well which was good to see.*

*Part (iii) was also weak, candidates did gain some marks for discussing geared beta but in general the answers did not score well. Some candidates were excellent and were able to discuss geared beta well and apply it to the question asked.*

**[Paper Total 100]**

# END OF EXAMINERS' REPORT