INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2017

CT2 – Finance and Financial Reporting Core Technical

Introduction

The Examiners' Report is written by the Principal 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.

Luke Hatter
Chair of the Board of Examiners
July 2017

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

1. 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.

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. General comments on *student performance in this diet of the examination*

1. There were many excellent scripts in this examination.

2. Candidates performed well in most questions in this examination and the pass rate was lower than last diet but still healthy.

3. Question 20 was done very well which was encouraging. Candidates are very good at preparing financial statements and also show good understanding of the main principles.

4. Question 19 was done poorly by many candidates. This type of question comes up in most diets and is never done very well.

C. Pass Mark

The Pass Mark for this exam was 60.

Solutions

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

Workings:

Q10
A (2 – 0.5) / (20 + 6) = 5.8%
B 2 / (20 + 6) = 7.7% (Correct)
C (2 + 0.5) / (20 + 6) = 9.6%
D 2 / 20 = 10%

> Questions 1–10 were done very well in this diet. A number of candidates scored full marks.

Q11 The share price should always represent an unbiased valuation for the company. [1]
The $800 million market capitalisation is likely to be a valid reflection of expected cash flows. [1]
That expectation is, however, based on assumptions about the future operations of the company. If it is acquired by another business then it may become more profitable.[1]
The engineering company should consider whether it truly believes that it can manage Bolt more effectively than its current management team. [1]

There could be other reasons for paying more. For example, there could be synergies associated with combining the two companies. [1]
It would be logical for the market to attach some value to those so that the bidder was forced to pay something for the economies and so it will almost certainly be necessary to pay more than the $800 million for outright ownership. [1]
[Max 5]

> Many candidates achieved a pass in this question but few achieved a high mark.

Q12 The principal advantage is that the partners' personal assets will not be exposed to claims to the same extent as if the business was a traditional partnership. [1]
The LLP itself will be responsible for its own liabilities. [1]
That may prove ineffective in setting the business up if potential creditors are concerned that the LLP may default and then they could seek personal guarantees from the partners as individuals. [1]

It can be possible to lodge claims against individual members in the case of default by the LLP, which would further restrict the potential for limitation of liability. [1]
The fact that there are only three members, all of whom are likely to work closely together, means that there may be a realistic chance that it will often be possible to hold all three liable under this provision. [1]

Potential business contacts, including clients, may regard the LLP status as implying a lack of confidence on the part of the members. [1]
[Max 5]

> This question was passed by many candidates but the marks were fairly low. Lack of knowledge seemed to be the difficulty.

Q13 Taxpayers usually have a separate annual allowance for capital gains, which means that an element of capital gain is effectively tax free. [1]
If they are already taxpayers then they will be taxed on dividends at their marginal rate as a matter of course. [1]

Capital gains may be taxed at a lower rate than income, depending on the taxpayer's marginal rate. [1]

Capital gains offer far more scope for tax planning than income tax on dividends. [1]
The gain is not taxed until it is realised, so the taxpayer can delay the payment of tax by continuing to hold the shares. [1]
In the same way, the taxpayer could deliberately realise a gain in order to make full use of any spare capacity in the annual allowance for capital gains. [1]
No such discretion can be applied to income from dividends. [1]
[Max 5]

> Many candidates passed this question but did not get a high mark. The candidates knowledge of capital gains tax was limited.

Q14 The stock exchange is keen to ensure that markets are orderly and that any volatility is minimised. [1]
If companies withhold bad news until the last possible minute then markets may overreact when the news is eventually released. [1]
An earlier announcement will avoid the reaction associated with unrealistic expectations being allowed to develop, followed by a sudden disappointment. [1]

Making early announcements reassures the markets that bad news falling under these rules must be announced, thereby reducing the threat that speculation will undermine confidence. [1]
The knowledge that any serious adverse news must be reported should maintain confidence in market prices. [1]

Profit warnings reduce the risk of manipulation and profiteering by directors. For example, it would be tempting to sell shares in advance of the publication of bad news. [1]
Profit warnings reduce or even close the window that might be abused for this purpose. [1]
[Max 5]

> This question was not answered very well. Candidates wrote about share prices but did not really answer the question. There seemed to be a lack of knowledge on announcements.

Q15 A repurchase may send out a more acceptable message to stakeholders if the entity has a large surplus to distribute. [1]
An equivalent dividend may be unacceptable to, say, employees or customers because it may appear that the company is lavishing profit on its shareholders that could otherwise have been used to increase wages or reduce selling prices. [1]
A repurchase will create the impression that the shareholders are sacrificing some of their equity in the process. [1]

A repurchase will also avoid any expectation that future dividends will continue at this level or will increase even further. [1]

A repurchase may be motivated by a desire to rid the company of a large cash balance, rather than be the result of a significant equity balance arising from successful operations. [1]
The directors may be concerned that a dividend will be viewed as an admission of their inability to put the funds to good use in expanding the business. [1]

It may be more tax efficient for some shareholders to receive the proceeds of the distribution as a share repurchase rather than a dividend. [1]
[Max 5]

> This question was not done very well. It seemed to be a lack of knowledge that caused the problem. Many candidates did not answer the question but just wrote about repurchase of shares in very general terms.

Q16 Tolerance for gearing depends in part on the attitude of lenders, [1]
which can vary between countries. Some countries have a strong emphasis on equity financing, with very little direct engagement between companies and their lenders. [1]
In such cases, the banks are less likely to support a company through any short to medium term difficulties. [1]
That would discourage borrowers from being highly geared and lenders from advancing a large amount. [1]

There are also cultural issues, with stakeholders having different attitudes towards risk. [1]
In some countries the additional risks associated with gearing are tolerated because it offers a cheaper source of finance. [1]
In such countries it may be deemed less acceptable to foreclose in response to a short-term difficulty and so the downside risks are more easily managed. [1]

[Max 5]

> This question was not done very well, in many cases candidates could discuss gearing well but did not answer the question. It seemed to be a problem with applying knowledge to the question.

Q17 Shareholder wealth increases because of profit, so the shareholders will have little interest in investing in a company that is not expected to be profitable. [1]
Liquidity is simply an enabling factor that ensures the company's survival in the short term. [1]

If a company is consistently profitable then it should be capable of generating cash from operations. [1]
The link between profit and cash can be indirect, but in the long term a profitable company should be capable of generating cash and so should be able to survive a liquidity crisis, even if that requires further borrowing. [1]

Companies report annual profit figures, which give shareholders a meaningful insight into profitability. [1]
The statement of financial position is a snapshot at a point in time, so shareholders see very little about liquidity because even the latest statement of financial position will be several weeks out of date with respect to liquidity. [1]

[Max 5]

> This question was done well by many candidates.

Q18 The basic problem faced by the external auditor is that truth and fairness is difficult to define and so there may be doubt as to whether any given set of financial statements possess that quality. [1]
The auditor's credibility could be undermined by subsequent complaints about the truth and fairness of a set of financial statements on which a clean audit report has been published. [1]
The preparation of financial statements is governed by IFRS, but those standards are open to interpretation and application in different ways. [1]

The auditor's problems are exacerbated by the fact that there may be agency issues which encourage the directors to abuse any subjectivity in the preparation of the financial statements. [1]
The directors may be keen to find and exploit loopholes in IFRS and argue that the financial statements comply with the rules, so therefore they are "true and fair". [1]
The external auditor is constantly working against a whole industry devoted to "financial engineering" that develops such creative accounting schemes for sale to companies in order to enhance the impression created by their financial statements. [1]
[Max 5]

> This question was not done particularly well. The main issue seems to be a lack of knowledge.

Q19 (i) The accounting net book value has no direct relevance to the future cash flows associated with this venture and so it should effectively be disregarded. [1]
The only issue is that the financial statements will reflect this value to some extent in reporting on future performance and so we may have to consider how it will impact on reported earnings. [1]

It is true that the past cost of the building is a sunk cost, but that is a misleading argument. The upper floor has a value and that value changes according to the manner in which it is used. [1]
Even if the directors choose to leave the floor unoccupied and generating no return, there is an economic decision being made to forego future revenues. [1]

Occupying and using the upper floor for the consultancy venture will mean that the directors have to forego the £2.7m that could have been obtained from this sale. [1]
This is an opportunity cost that will undoubtedly affect future cash flows. [1]

The rental income is also an opportunity cost. It should be weighed up against the potential sale of the floor. [1]
While the sale generates more than £900,000, the rental agreement leaves us in possession of the property and so we should allow for that potential cash flow in comparing rental to sale. [1]

(ii) It should focus on future cash flows when choosing between these figures. [1]

Overall, it should estimate the opportunity cost associated with using this floor by determining the higher of the overall expected value to be obtained from renting out the upper floor and selling it. [1]
It may have to envisage a number of scenarios for the end of the five year rental period so that it can estimate ongoing cash flows. [1]
[Max 2]

(iii) Hort's directors had to make highly subjective judgements concerning the project's future cash flows and also the required rate of return at which these would be discounted. These judgements are open to manipulation in order to show a positive NPV. [1]
For example, the opportunity cost associated with the potential rental could be reduced or even eliminated if the directors chose to act on the assumption that it would be difficult to find a tenant for the whole period. [1]

There is a limit to the extent to which Hort's directors could manipulate this evaluation. They will be held accountable for the outcome of their investment decisions. [1]
Overstating the expected return on this project is likely to lead to the board being asked to comment on the reasons for a failed project in the fullness of time when the costs are written off Hort's financial statements and show a poor return on capital employed. [1]
If the board consistently rejects profitable projects then Hort will report poor returns through under investment. [1]

All investment appraisal techniques involve considerable subjectivity, so NPV is probably no worse than any other in that respect. [1]
For example, even payback could be manipulated through the distortion of cash flows or the threshold for an acceptable payback period stretched or compressed to fit the board's wishes. [1]

Projects are usually evaluated in a formal way through a project appraisal document. That will create a paper trail back to the reasoning applied by Hort's directors in deciding to proceed with this project. [1]
Even if that document will never be released to the shareholders, its existence will deter overt manipulation because it could be used as the basis for action against the directors who approved the investment. [1]

Net present value does offer the potential to align investment appraisal decisions with the shareholders' welfare. The fact that it may be open to abuse does not undermine the internal economic efficiency of the technique. [1]

The technique provides a framework for pulling together expectations about the project and so it enables decision makers to evaluate the expected outcome in a logical manner. [1]

[Max 10]

[Total 20]

This question was done very badly by most candidates. The marks in all three sections were very poor.

This type of question is always in the exam it is therefore surprising that candidates do so badly in this question. Basically it is a lack of knowledge that is the problem.

Q20

Trent Ltd
Statement of Profit or Loss for the year ended 30 September 2016

	£000		
Revenue	488,400		[½]
Cost of sales	(336,676)		
Gross profit	151,724		
Selling and distribution	(73,260)		
Administrative expenses	(20,600)		
Operating profit	57,864		
Finance charge	(12,000)		[½]
Profit before tax	45,864		
Tax expense	(8,450)		[½]
Profit for the year	37,414		
		Format	[1]

Trent Ltd
Statement of Changes in Equity for the year ended 30 September 2016

	Equity shares £000	*Retained earnings £000*	*Total £000*	
Opening balance	225,000	63,540	288,540	[½]
Profit for the year		37,414	37,414	[½]
Dividend		(45,000)	(45,000)	[½]
Closing balance	225,000	55,954	280,954	
			Format	[½]

Trent Ltd
Statement of Financial Position as at 30 September 2016

	£000		
Non-current assets	373,204		[½]
Current assets			
Inventory	8,470		[½]
Trade receivables	37,050		[½]
Cash	13,780		[½]
	59,300		
Total assets	432,504		
Equity			
Share capital	225,000		[½]
Retained earnings	55,954		[½]
	280,954		
Non-current liabilities			
Debentures	135,000		[½]
Current liabilities			
Trade payables	8,100		[½]
Tax	8,450		[½]
	16,550		
	432,504		
		Format	[1]
			[10]

Note:

Non-current assets

	Property	*Plant and equipment*	*Delivery Vehicles*	*Total*	
	£000	*£000*	*£000*	*£000*	
Cost	294,800	271,230	84,000	650,030	[1]
Depreciation					
Opening balance	43,680	145,590	39,000	228,270	[½]
Charge for year	5,896	31,410	11,250	48,556	[½]
Closing balance	49,576	177,000	50,250	276,826	
Net book value	245,224	94,230	33,750	373,204	[½]

Workings:

Cost of sales

Manufacturing overheads	20,610	[½]
Opening inventory	7,920	[½]
Production staff wages	32,610	[½]
Less: reclassified as capital	(800)	[½]
Purchases	247,500	[½]
Closing inventory	(8,470)	[½]
Property depreciation	5,896	[1]
Plant and equipment depreciation	31,410	[½]
	336,676	

Property depreciation = (294,000 + 800) × 2% = 5,896

Selling and distribution

Delivery staff wages	10,860	[½]
Delivery vehicle running costs	15,600	[½]
Sales staff salaries	35,550	[½]
Delivery vehicle depreciation	11,250	[½]
	73,260	

Administrative expenses

Administrative expenses	8,000	[½]
Directors' salaries	12,600	[½]
	20,600	[1]

[Total 20]

This question was done extremely well with many candidates scoring full marks.

END OF EXAMINERS' REPORT