INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2016 (with mark allocations)

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.

F Layton
Chairman of the Board of Examiners
June 2016

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 be penalised where excessive rounding has been used or where insufficient working is shown.

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

The general performance was similar to results in the past, well-prepared candidates scored well across the whole paper. As in previous diets, overseas candidates did not perform quite so well as UK candidates. The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates approaching the subject for the first time are advised to concentrate their revision in these areas. The main problem was Q19, however many candidates scored high marks in most questions.

C. Pass Mark

The Pass Mark for this exam was 60%.

Solutions

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

Questions 1–10 were done well by most candidates. No particular question caused a problem for candidates.

Q11 Individuals have an annual allowance for capital gains, which means that some capital gains are effectively tax free. [1]
Individuals usually pay tax at a lower rate on capital gains than on income. [1]
Capital gains are not taxed until the gain is realised. [1]
Thus, tax can be delayed by deferring the disposal of the shares until the taxpayer requires the cash. [1]

Some taxpayers have very low incomes and will be able to offset dividends against their personal allowances. [1]

Taxpayers will tend to gravitate towards companies whose dividend policies are consistent with their tax preferences. [1]
[MAX 5]

Candidates did reasonably well in this question. The candidates had mixed results with some doing very well and less prepared candidates doing very badly.

Q12 Existing shareholders may benefit from the fact that convertibles can offer lower interest rates during the loan phase. [1]
That could be a permanent benefit in the event that the conversion is optional and the lenders choose not to convert. [1]
The convertible may also be the only way in which the company will be able to attract investment to fund a positive NPV project that will benefit the shareholders. [1]

The possibility of conversion also means that the company will not have to bear the risk of being unable to raise sufficient cash to repay the loan. [1]

The disadvantage is that the conversion will almost certainly be on terms that are advantageous to the lender. [1]
That is effectively a cost to the existing shareholders because their equity will be diluted and their personal wealth will be reduced. [1]
[MAX 5]

> This question was done well by most candidates.

Q13 The fact that the company is quoted means that it will find it much easier to raise funds to expand. [1]

The shareholders will now have the means to liquidate their investments so that their wealth is no longer tied up in the company. [1]
The stock market price will enable the shareholders to value their shares for tax purposes in the event of, say, a gift of shares to a relative. [1]

The shareholders will have to sacrifice their control because of the need to sell shares to a wider base. [1]
The company will also be subject to far greater scrutiny because of its quoted status. [1]
Managerial decisions will be evaluated in terms of their impact on the share price. [1]
[MAX 5]

> This question had the highest marks of all the short questions.

Q14 Business cultures vary with respect to borrowing. In some countries it is the norm to seek equity funding whereas there is greater use of debt in others. [1]
Local shareholders will be nervous if a company exceeds the normal limits, but they will also be dissatisfied if the opportunities afforded by debt are passed up due to excessive reliance on equity. [1]

The fundamental difference is the attitudes of banks and other stakeholders. [1]
In some countries, the banks are tolerant of companies that are faced with temporary difficulties with cash flow. [1]

If the lender is likely to support a borrower through a difficult period then the bankruptcy risks associated with gearing are reduced. [1]
The stability of the local economy is also an issue. [1]
If the local economy is steady then the volatility in operating profit that is accentuated by gearing is less likely to occur. [1]
[MAX 5]

> This question was done reasonably well by many candidates but there were also some very weak attempts.

Q15 Investment analysis requires far more than a quantitative analysis such as the calculation of NPV. Firstly, a number of assumptions have to be made in order to determine future cash flows. [1]
Those assumptions must be made explicit and justified and the appraisal document offers the opportunity to do so. [1]

Completing the document creates the framework for evaluating the project in a systematic and disciplined manner. [1]
For example, there can be a formal requirement to evaluate risks and the project's strategic fit with the company overall. [1]
The document makes it far more difficult for the sponsors to present an optimistic and one-sided analysis. [1]

The document will also assist with the project's management because it will specify various plans and objectives that can be used to measure progress once the project is under way. [1]
[MAX 5]

> This question was done well by many candidates.

Q16 The first step is to identify the variables that should be taken into account in the simulation. [1]
For example, interest rates and other economic variables may affect consumer spending and so those will have to be introduced as factors. [1]
Then the project's cash flows will have to be modelled using estimates based on the factors. [1]
An attempt will have to be made to determine how an increase in interest rates might affect demand. [1]
This model will be complicated, otherwise there will be little point in using simulation. [1]

The model should be run repeatedly until the average of the results obtained settle down. [1]
The model can be run with different assumptions to determine which assumptions are important in terms of the sensitivity of the results. [1]

The results have to be analysed carefully because they will provide an indication of the distribution of expected returns. [1]
The wider the disparity between best, worst and most likely returns the greater the risk associated with this investment. [1]

[MAX 5]

> This question was done badly with many candidates giving very short answers.

Q17 The cash flow statement indicates whether the entity is capable of generating cash from its operations. [1]
In the short term, profit is not a good indicator of cash flow because there are so many variables that can affect profit but not cash and vice versa. [1]
The company's future could be in jeopardy if its cash is not properly managed. [1]

In the absence of a cash flow statement, the only measure of cash movements would be the increase or decrease in the bank balance from one year end to the next. [1]

The cash flow statement provides a formal description of the cash inflows and outflows, all linked to common themes such as investment activities. [1]
The shareholders can then see where the company is raising cash from and where the resulting funds are being spent. [1]

[MAX 5]

> This question was done badly by many candidates.

Q18 The revaluation reserve arises because book values have been revised upwards in order to reflect the fair values of the company's assets. [1]
The balance indicates that the figures in the statement of financial position are potentially more relevant than if the assets had been left at cost less depreciation. [1]

While it may be argued that the entity has generated additional shareholder wealth through holding the assets that have been revalued, the danger is that the gain has not been realised. [1]
The shareholders cannot expect a fresh increase in the revaluation reserve to lead to an increase in dividends. [1]
Indeed, the gains may have to be reversed in the future if market changes mean that the fair values decline. [1]

The revaluation of property, plant and equipment may lead to greater subjectivity in the financial statements. [1]

That will extend to the statement of profit or loss because there will be additional depreciation being charged. [1]

[MAX 5]

This question was done very badly by a significant number of candidates.

Q19 (i) The most important issue is whether Parrent can exercise control of Subb. [1]
Parrent will have to demonstrate that by showing that it can compel Subb to behave in the manner that suit's Parrent's interests. [1]

The fact that Parrent does not own sufficient shares to exercise control is irrelevant because control can be obtained through other means. [1]
In this case, Parrent can appoint board members to Subb's board, which implies the possibility of control. [1]
Presumably, there will be sufficient appointees to carry votes at board meetings or the directors appointed by Subb will have enhanced voting rights.

The fact that Parrent can create consolidated financial statements that include Subb indicates that it can exercise sufficient control to obtain the necessary facts and figures. [1]

[Total 5]

(ii) Shareholders have limited liability. [1]
Parrent is no more responsible for Subb's liabilities than any other shareholder in the event of a default. [1]
If Subb is unable to meet its obligations then Parrent would be well within its rights to leave Gryffe's balance unpaid. [1]

It is debatable whether it would be in Parrent's best interests to behave in this manner. Firstly, permitting Subb to fail would probably mean that Parrent would lose its investment and it would have to report a loss in its financial statements. [1]
Secondly, the opportunity to participate in future profits from Subb would be lost. [1]
Finally, Parrent's reputation would suffer. [1]

[Max 5]

(iii) The external auditor reports on the truth and fairness (or fair presentation) of the financial statements. [1]
That means that the statements offer stakeholders a credible basis upon which to base decisions. [1]

The audit report makes no mention of the strength or security of the company itself. [1]
It is for the readers to read and interpret the financial statements and to decide how to behave. [1]

The delays inherent in publishing financial statements means that the information on Subb's short-term liquidity will be out of date by the time that the annual report becomes available. [1]
The external auditor will not accept any explicit responsibility towards the users of the audited financial statements. [1]
The auditor will not, for example, compensate Gryffe if it suffers a loss because of a bad credit decision**.** [1]
[Max 5]

(iv) The first step would be to request that Parrent grants Gryffe a formal guarantee in support of Subb. [1]
That would mean that Gryffe would then have a legal right to pursue Parrent in the event of any default by Subb. [1]

Gryffe may also attempt to reduce the risk of having to pursue Parrent for payment. One approach to doing so would be careful credit control procedures. [1]
All receivables should be monitored and slow payment investigated and pursued. [1]
Slow payers could have their credit facilities suspended or even withdrawn. [1]

Gryffe could also set a credit limit, effectively restricting the maximum exposure to loss in the event that Subb defaults. [1]
[Max 5]
[TOTAL 20]

This question was not done well. Parts (i) and (ii) were generally reasonably well done, but parts (iii) and (iv) were done very badly. This resulted in many candidates failing this question.

20 (i) **Ratios**

	Pensions	**Insurance**	**Risk**
ROCE	2205/(3861+1600) = 40%	2705/(3663+1600) = 51%	1746/(1248+800) = 85%
Fees/salaries	11,000/7700 = 143%	9000/5400 = 167%	3600/1440 = 250%
Net profit %	2205/11000 = 20%	2705/9000 = 30%	1746/3600 = 49%

[1 mark per ratio – Max 5]

While Risk is the smallest department, it could be argued that it is the most profitable.

The department's return on capital employed is greater than either of the other two. [1]
This means that the department produces more profit for every £ invested than the others. [1]
(The very high ROCEs is not surprising given the nature of this business, which is not really capital intensive.) [1]

The margin on the Risk department's salaries is also higher. [1]
Risk can charge £250 fees for every £100 of salaries. This means that the company can actually make more profit from work done in this department than in either of the other two. [1]

The Risk department also has a higher net profit percentage, which suggests that overheads are not disproportionately high. [1]

If anything, Jute should consider expanding Risk to take advantage of the higher margins and returns which can be obtained from this type of work.

It should also be noted that all three departments are being charged with significant centralised costs that would still be borne even if the departments ceased to operate. [1]
That strengthens the business case for retaining all of them.

[Max 5]

(ii) (a) The average time taken to convert salaries into fees is essentially the inventory turnover ratio:

$3,672/14,540 \times 365 = 92$ days [1]

(b) Average time taken for customers to settle bills:

$1,467/23,600 \times 365 = 23$ days [1]

[Total 2]

(iii) The company's quick ratio is $(5,629 – 3,672)/1,357 = 1.44:1$ which appears to be reasonably healthy. [1]
It has, however, got a month's salary outstanding and relatively little cash with which to pay it. [1]
This means that the company could find it difficult to continue trading. [1]

The main problem is that the company has two steady drains on cash: salaries and loan interest. [1]
Income is much more erratic, being dependent on invoicing clients for work done. [1]

[Max 4]

(iv) Invoices are settled very quickly after being presented to customers. [1]
The most important means by which the company could improve its cash flows is by speeding up the invoicing process. [1]
This could mean scheduling work so that projects can be completed so that invoices can be raised. [1]
Contracts with new clients should also be negotiated on the basis that work can be invoiced at regular periods. [1]

Given the company's pressing need, the most reliable solution would be to seek an injection of cash from a bank or some other source. [1]

[Max 4]

[TOTAL 20]

This question was done well by many candidates. The weakest part was part (iii), the rest were good.

END OF EXAMINERS' REPORT