INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2014 examinations

Subject 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 at the date 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

November 2014

General comments on Subject CT2

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.

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.

Comments on the September 2014 paper

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 all questions.

1	B or C were accepted as correct answers	[2]
2	C	[2]
3	B	[2]
4	C	[2]
5	D	[2]
6	B	[2]
7	D	[2]
8	A	[2]
9	B	[2]
10	D	[2]

Workings

2 £0.03 = £0.25 – 0.22
£0.20 = premium
£0.23 = £0.25 + 0.20 – 0.22
£0.25 = nominal value

8 17.4% = 400,000/(1,000,000 + 800,000 + 500,000)
22.2% = 400,000/(1,000,000 + 800,000)
26.7% = 400,000/(1,000,000 + 500,000)
30.8% = 400,000/(800,000 + 500,000)

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

11 Market prices are based on actual transactions, so market participants are actually entering into transactions at these prices. Most quoted securities tend to trade quite freely, so market prices are also likely to be quite up to date. The fact that these prices are observable also means that they can be legitimated, unlike other valuations that are likely to be based on models or opinions. The objectivity associated with market prices means that they are likely to be acceptable to, say, tax authorities. [5]

This question was not specifically looking for a discussion of market efficiency, but an answer based on the efficient markets hypothesis would be perfectly acceptable.

This question was done well by candidates.

12 Non-recourse factoring is only worthwhile if an entity makes significant credit sales. The entity will also be looking to release cash from its trade receivables, which suggests that it might be in need of improving cash flows. Non-recourse factoring usually involves a range of additional services, such as bookkeeping as well as credit protection. There is very little point in paying for non-recourse factoring unless there is a need for those services. The factor will only be willing to offer non-recourse factoring if the customers are reasonably good credit risks. [5]

This question was done reasonably well by many candidates. The only problem was that several candidates did not appear to understand the difference between factoring and non-recourse factoring and their answer was therefore not clear.

13 Swap arrangements do not involve the actual exchange of liabilities. The two parties usually arrange a net payment from one to the other, depending on the rates paid on the variable rate liability. In the worst possible case, the party that is due to receive a net payment will lose this amount because the counterparty defaults. The other risk is that any default will leave both parties without the protection of fixed or variable rate interest, which was the purpose of the swap in the first place. Both parties should take the usual precautions of running credit checks. Sometimes the counterparty will be a commercial bank rather than another business and so there will be a better basis for trust. [5]

This question was done well by many candidates.

14 The expectation is that the scrip issue will be interpreted as a sign of confidence and so the share price will increase. That only happens in practice because the directors often maintain the dividend per share after a small scrip issue and so it might be viewed as a signal that the board intends to increase dividends. Given that the shareholders appear to lack confidence, they are unlikely to boost the share price just because of a scrip issue.

The issue would dilute the existing share price, which could disrupt the share price. Fresh shares cannot be issued for any less than the nominal value of £0.25 per share. A significant scrip issue could leave the share price so close to the nominal value that there is very little scope for offering the discount that is necessary to guarantee the success of the issue. [5]

This question was done very well.

15 Opportunity costs should be taken into account, particularly when projects are mutually exclusive or there is capital rationing. When accepting one project means that it would be impossible to proceed with another then the board should consider whether the project under consideration is the best use of the entity's funds.

Opportunity costs can be difficult to determine. It is necessary to identify all of the alternative uses to which those funds can be applied or to identify all of the projects that would be rendered redundant. It may be difficult for the managers who are making the proposal to be aware of those implications, especially when the projects are not directly drawn from the bidding department.

It may be a little naïve to expect the champions of one project to be clear and honest about another project's opportunities. [5]

This question was done well by many candidates.

16 Probability trees make it easy to determine the expected value of a complex project that has various levels of decision that have to be taken. Different branches of the tree will deal with the possibilities that were identified at the outset of the project and so the decisions that will be appropriate at each stage of the project can be identified well in advance and an appropriate direction selected. Decision trees generally offer a clear and unambiguous solution to a potential problem.

On the other hand, expected values ignore the fact that many projects will not have an "average" outcome. For example, a decision tree might suggest that a project has a very small positive expected value when the actual outcome will either be a large profit or a large loss. [5]

This question was done reasonably well by most candidates.

17 The external auditor offers an opinion on the fair presentation/truth and fairness of the financial statements. That gives the shareholders the reassurance that the figures have not been manipulated or distorted in a manner that would make them misleading. The audit opinion is based on the collection of evidence on the accuracy of the bookkeeping records. Auditors are qualified accountants who are experts in financial reporting matters. The auditor's reputation will be impaired if an invalid or unsupported opinion is offered. [5]

This question was not done as well as expected. In general many answers were vague and did not answer what was asked in much detail.

18 The upside risk is that very little cash will be tied up in working capital. Cash flows will be rapid and so the entity should be reasonably sound in terms of liquidity.

Reducing inventory can be achieved through careful management and monitoring. Such an approach creates a cost in terms of the time spent managing inventory and also having to incur ordering costs from placing a larger number of smaller orders. The alternative is that the entity simply runs inventory down to such a low level that it runs out, possibly losing sales and disrupting operations. Reducing receivables usually requires pressing for rapid payment, which may also reduce demand if customers are keen to obtain a more lenient set of credit terms. [5]

This question was done well by many candidates. The main problem with candidates who did less well was a failure to discuss inventory in any detail.

19 (i) Debt has the advantage of interest payments being tax deductible. Lenders usually have quite a lot of security, so they charge a reasonably low rate.

This business may make many lenders nervous. It is a new venture that may not prove successful because it is selling a niche product that is untried in the UK. The assets will be in the form of inventories of products that could be difficult to sell quickly in the event of a foreclosure.

In the event that the business succeeds it may find cash flows problematic. Imports are likely to be for cash and sales are likely to be on credit, which will stretch working capital and that may make it difficult to service debt.

Equity will be relatively expensive because potential investors may be nervous about the business plan. They may require a considerable percentage of the equity to make the risk worthwhile. Trevor and Simone may find it difficult to retain full control if they wish to attract investors.

The fact that the founders wish to retire for good in the medium term future may deter many potential investors. If the business succeeds then the other shareholders may be unable to raise sufficient cash to buy Trevor and Simone out and so they may be faced with the loss of control to a new set of investors. [10]

(ii) There is likely to be an optimal level of gearing because our two founders are unlikely to be able to create their own gearing, which is the basis of the MM irrelevance argument. Ideally, the gearing level should be sufficient to get the best of the lower gross cost and the tax relief compared to the higher cost of equity.

Trevor and Simone will be relatively risk averse because their life savings are being invested in this business. They cannot really afford to risk liquidating the business in order to settle overdue loan repayments. That suggests that benchmarks, such as the gearing ratios of similar businesses in the same line may not be particularly appropriate.

The fact that this is a new business that is selling products that are, by definition, unproven makes it more difficult to predict the cash flows from which debt can be serviced. The founders must also allow some of their debt capacity to remain unused so that they have a source of cash to deal with emergencies. They do not have any cash of their own left over in order to inject further equity.

Lenders may offer guidelines as to the maximum that they will be prepared to advance, but that does not help Trevor and Simone because the lenders will be banking on the protection offered by the buffer of the founders' equity.

The fact that there are only two principal decision-makers also complicates matters. Trevor and Simone may have different risk tolerances and each may have a different view about the ideal level of gearing.

[10]
[Total 20]

This question was unfortunately done very badly by a number of candidates. Candidates struggled to say much about debt and equity and financing and then candidates did not write much at all about gearing. Many candidates did not understand that having two decision makers complicated the situation. Candidates did not think through what they had learned and apply it to this particular scenario successfully so many did not do well in this question.

The problem seemed to be that applying knowledge to this scenario was difficult for candidates.

20 Victor Ltd
Income Statement for the year ended 31 August 2014

Revenue	108,000
Cost of sales	(62,011)
Gross profit	45,989
Selling and distribution	(12,387)
Administrative expenses	(10,267)
Operating profit	23,335
Finance charge	(3,480)
Profit before tax	19,855
Tax expense	(4,190)
Profit for the year	15,665

Victor Ltd
Statement of Changes in Equity for the year ended 31 August 2014

	Equity shares *£000*	*Retained earnings* *£000*	*Total* *£000*
Opening balance	60,480	23,760	84,240
Profit for the year		15,665	15,665
Dividend		(3,240)	(3,240)
Closing balance	60,480	36,185	96,665

Victor Ltd
Statement of Financial Position as at 31 August 2014

	£000
Non-current assets	127,861
Current assets	
Inventory	675
Trade receivables	9,072
Prepayment	10
Cash	11,340
	21,097
Total assets	148,958
Equity	
Share capital	60,480
Retained earnings	36,185
	96,665
Non-current liabilities	
Debentures	43,470
Current liabilities	
Trade payables	2,844
Accruals	1,789
Tax payable	4,190
	8,823
	148,958

Note: Non-current assets

	Factory	*Property, plant and equipment*	*Total*
	£000	*£000*	*£000*
Cost	100,440	90,504	190,944
Depreciation			
Opening balance	19,008	25,920	44,928
Charge for year	2,009	16,146	18,155
Closing balance	21,017	42,066	63,083
Net book value	79,423	48,438	127,861

Workings

Cost of sales	
Opening inventory	2,160
Manufacturing overheads	3,606
Purchases	27,000
Wages – manufacturing	11,772
Closing inventory	(675)
Factory depreciation	2,009
Equipment depreciation	16,146
Accrued wages	3
Prepaid insurance	(10)
	62,011

Selling and distribution	
Wages	12,384
Accrued wages	3
	12,387

Administrative expenses	
Trial balance	4,500
Audit fee	3,780
Wages	1,944
Accrued wages	3
Accrual	40
	10,267

Accruals	
Wages	9
Administration	40
Accrued interest	1,740
	1,789

[20]

Question 20 was done really well by most candidates. This contributed to the very good pass rate for this diet. It was evident that candidates had spent time learning this topic and it paid dividends as the marks were very high for this question.

END OF EXAMINERS' REPORT