INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2015 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

June 2015

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 April 2015 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 problems were Q15, 16, 19 and 20, however many candidates scored high marks in all questions.

1 B
2 A
3 A
4 B
5 A
6 B
7 B
8 A
9 C
10 D

Workings

5
2 years 10 months = £700,000/(180,000 + 70,000)
3 years 11 months = £700,000/180,000
6 years 4 months = £700,000/(180,000 – 70,000)
10 years = asset life

7
£1,650,000 = £200,000 + 1,700,000 – 250,000
£2,550,000 = £200,000 + 1,700,000 + 900,000 – 250,000
£2,600,000 = 1,700,000 + 900,000
£2,650,000 = £200,000 + 1,700,000 + 900,000 + 250,000

8
£190,000 = (910,000 – 260,000) – (700,000 – 240,000)
£210,000 = 910,000 – 700,000
£230,000 = (910,000 + 260,000) – (700,000 + 240,000)
£650,000 = 910,000 – 260,000

10
£60,000 = 20% × (900,000 – 600,000)
£180,000 = 20% × 900,000
£280,000 = 20% × (800,000 + 600,000)
£340,000 = 20% × (800,000 + 900,000)

Questions 1–10 were done reasonably well by most candidates, no particular question caused problems.

11 The most immediate implication is that the taxpayer has a much greater degree of control over the timing of tax payments. Tax can be delayed indefinitely simply by retaining the asset. Sales can be timed to make the best possible use of any tax allowances.

Taxpayers do not need to pay tax until they are raising cash from the disposal of the asset. That avoids having to be forced to sell an appreciating asset in order to raise cash to pay tax on the capital gains.

The gain is based on an actual transaction, so it can be determined with greater accuracy.
The tax system may deter the disposal of assets because of the need to pay tax on the gain arising from a disposal.

This question was answered well by most candidates.

12 Debentures are generally secured against assets, with the debenture holder being paid before virtually any other creditor. That level of security means that the debenture holder does not need to receive a very high rate of interest.

It may be necessary to seek permission from the debenture holder before an asset that has been pledged can be sold.

There is very little prospect of flexibility in the event of a problem. The debenture holder will have the right to force the sale of the assets that form the security and so any cash flow problems could prove catastrophic.

This question was answered well by many candidates.

13 The lessor now owns the building and so runs very little risk in the event that the software company defaults on the rent payments. That makes this a relatively inexpensive financing package for the software company.

The software company will no longer benefit from any capital appreciation on the office building. Presumably the lessor will be able to increase rents over the long-term if property prices rise.

This is the software company's only real asset. It now has nothing to pledge as security in the event of raising further funds at some future date.

This question was answered well by many candidates.

14 There is a risk that the company will find itself in difficulty if it has insufficient cash left after the dividend payment. The shareholders may question the wisdom of paying the full dividend in these circumstances and so the directors may simply appear reckless.

The payment of a dividend is generally regarded as a fairly robust sign of confidence. If the directors believe that the company can afford the dividend then it may reassure the shareholders.

The fact that the directors are generally reluctant to reduce the dividend payment means that any reduction or suspension will be seen as convincing evidence that the company is in trouble. There may be a disproportionate reduction in the share price.

This question was answered well by many candidates.

15 The beta value is basically determined by regressing returns on a security against those from the market as a whole. There is no real reason to believe that the beta will remain constant from period to period. Different market conditions may affect the return on the security in different ways and so changes in, say, interest rates may affect the security more than, say, changing currency values.

If investors are attracted by particular systematic risk profiles then that could affect the demand for a security and even that could alter the beta to some extent. Strong demand could drive up share prices regardless of the market situation and that could raise or lower the beta.

This question was not done well. Few candidates demonstrated more than basic knowledge of betas. The marks were quite low with many candidates scoring less than half marks. In the past questions on beta have been done well so this was surprising. Very few candidates had any knowledge of systematic risk.

16 The fact that there are two periods with net outflows can create the possibility of a second IRR. If discount rates are very small then the cost incurred at the conclusion of the project will have much greater significance and that could be enough to make the net present value negative.

This project has a positive NPV when the required rate of return is greater than 2% or less than 9%. There is not a single hurdle rate, but the cost of capital can be related to the IRR in the same manner as for any other project.

It is unlikely that the company will be looking for a return of less than 2%, so this project appears to be worth accepting provided the company is willing to accept a return of 9% or less.

This question was done badly.
Few candidates demonstrated reasonable knowledge of IRR or NPV. Few candidates commented on the hurdle rate.

17 Strategic fit can be thought of as a non-monetary benefit that can be obtained from an investment. The fact that the project is a good fit with the business means that it may create future opportunities for expansion or it may reduce certain risks. The fact that this company is operating flights between a number of countries may make it ideally suited to exploit synergies such as using surplus space on aircraft to carry freight. These opportunities might be difficult to foresee at the evaluation stage of the project and they will be lost if the company does not take the occasional chance on an opportunity that may yield dividends.

This question was answered well by many candidates.

18 Accounting standards make accounting statements far more credible. Shareholders have the means to specify the manner in which the figures are determined and so have a better understanding of the figures prepared by the directors.

Mutual understanding of the figures will reduce contracting costs. Lenders can specify debt covenants in terms of accounting numbers with no real concern that the directors will manipulate accounting numbers in order to reduce, say, the gearing ratio.

Accounting standards provide auditors with the basis for checking the fair presentation of the financial statements.

This question was answered very well.

19 (i) It could be argued that the assets and liabilities in respect of the charity transaction should be excluded from the calculation of the current ratio.

	February	*January*
Gross profit margin	532/(900 – 200) = 76%	525/700 = 75%
Current ratio	(1,042 + 29)/185 = 5.8:1	952/360 = 2.6:1
Trade receivables turnover	1,010/900 × 31 = 35 days	720/700 × 31 = 32 days
Trade payables turnover	185/(368 – 200) × 31 = 34 days	360/(175 + 200) × 31 = 30 days

The table above shows the most likely versions of the acceptable answers. The following alternatives are acceptable:

	February	*January*
Trade receivables turnover	1,010/900 × 365/12 = 34 days	720/700 × 365/12 = 31 days
Trade payables turnover	185/(368 – 200) × 28 = 31 days	360/(175+200) × 31 = 30 days
Trade payables turnover	85/(368 –200) × 365/12 = 33 days	360/(175+200) × 365/12 = 29 days

(ii) The £200,000 of sales at cost should be excluded from February's turnover, otherwise the directors will not be comparing like with like – January's percentage will be made up entirely of normal trading activity and February's will be a weighted average of trade sales and a major transaction with a zero gross profit.

The £400,000 which has been paid for the new fixed asset should be excluded from the bank overdraft. This will increase the bank balance to +£29,000. This is because the liability is not really part of the normal overdraft and will be replaced by a term loan.

(It might also be argued that the assets and liabilities relating to the "charity" transaction should be excluded on the grounds that this is non-recurring and has a distorting effect. The difference here is that the company does actually have to finance these assets and settle the liabilities under normal trade terms.)

(It might also be argued that the purchases figure can be best estimated by adding the cost price of the charity sale to January's cost of sales and subtracting from February's. The figures suggest that the company has built up inventory in January in advance of this sale.

(iii) ROCE cannot really be calculated with any great accuracy for a period as short as one month. The company might not make really accurate adjustments for stocks as at the beginning and end of each month, monthly depreciation charges, accruals and prepayments, etc.

If the company has any kind of annual business cycle then the directors might get the mistaken impression that a month has been poor because of fluctuations in return (as sales rise and fall) or capital employed (as net assets change during the year).

While ROCE is the most important profit ratio, it is quite possible that it would be far more sensible to concentrate on the secondary ratios such as gross profit %, asset turnover, etc.. If these are maintained during the year then the company should generate an acceptable return over the course of a year.

Part (i) – this part was answered badly with many candidates failing to calculate the ratios correctly which was disappointing. Even gross profit was problematic.
Part (ii) – unfortunately this part was answered badly with few candidates suggesting the correct adjustments.
Part (iii) – candidates did not demonstrate much knowledge of ROCE. The comments tended to be very basic and just commenting on it being a measure of profitability. As a result of this the marks were quite low for this section of the question.

20 (i) Having two different people head the company offers a degree of mutual oversight. The chairman and chief executive can be responsible for different aspects of the management of the company.

The chairman and the part-time directors do not benefit when the company reports higher profits and so they have no great incentive to misbehave. They are likely to insist that the company is properly managed because their reputations will be at risk for no purpose if they do not.

The full-time directors are all to receive profit-related bonuses. That will give them an incentive to work in the best interests of the shareholders. The risk of a repeat of the previous difficulties will be diminished because of the oversight from the chairman and part-time directors.

The chairman and part-time directors can monitor the company's activity for lavish and unnecessary expenditure. They should have sufficient business experience to realise the difference between legitimate expenses and extravagances such as the limousines.

The fact that the full-time directors stand to share in a substantial shareholding is a further incentive to work in the shareholders' interests. These shares will be far more valuable if the directors can work towards the maximisation of the share price. The shareholders will, hopefully, have greater confidence because of this. Furthermore, the three year vesting period provides the directors with an incentive to settle with the company and offer continuity of management. That period is also quite a long time in which to evaluate the directors' competence and integrity.

Note: answers could refer to the requirements of the UK Code for Corporate Governance or similar documents, but there was no need to do so in order to obtain credit.

(ii) Given the problems with the overstated profits in the past it is clearly undesirable to continue with the previous auditor. The shareholders are unlikely to have a great deal of confidence in the outgoing firm.

A larger audit firm may be more credible. It has more to lose in terms of its reputation and so the auditor may be less willing to compromise over accounting issues

The fact that the audit fee is greater may also create the impression that more work has been done or that the audit has been more thorough. Shareholders may contrast the fee with that charged by the previous auditor and may perceive the increase as an investment in higher quality.

All auditors have the same professional qualifications and so there is no guarantee that a bigger firm will necessarily provide a better quality service. The higher cost of a bigger firm may not be justified in terms of the actual assurance given.

Part (i) – this part was also answered quite badly. Candidates did not demonstrate knowledge of corporate governance issues. However, many candidates gave good answers about maximising shareholder wealth and confidence which helped increase the pass rate. Part (ii) – answers to this part of the question were mixed. There were some very good answers but also some poor ones.

END OF EXAMINERS' REPORT