

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2016

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
December 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 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 very good.
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.
5. In general the MCQs were not done as well as usual although they were of the same standard.

C. Pass Mark

The Pass Mark for this exam was 60.

Solutions

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

Workings:

Q5 $(40\text{m} + (2\text{m} \times 3.5) - 800,000)/12\text{m} = \3.85^* $(40\text{m} + (2\text{m} \times 3.5))/12\text{m} = \3.92
 $(40\text{m} + (2\text{m} \times 3.5) - 800,000)/10\text{m} = 4.62$ $(40\text{m} + (2\text{m} \times 3.5))/10\text{m} = \4.70

Q9 $11+2+6+8 = 27$
 $11+7+2+8 = 28$
 $11+7+2+6+8 = 34^*$
 $11+7+2+6+8+4 = 38$

The MCQs were not done quite as well as usual. Questions 1, 2 and 5 were frequently incorrect.

Q11 Tax law often strives to ensure fair treatment of taxpayers. [1]
 (both private and corporate). It would be unfair to tax the same profit twice. [1]
 A double tax treaty creates the possibility of some reciprocation between countries in preventing double taxation of overseas earnings. [1]

Tax law also strives to encourage behaviour that is in the country's economic interest. [1]

Double-tax treaties encourage companies to trade overseas. [1]

That creates a greater potential for exports and management of the balance of trade [1]
 [Max 5]

This question was done reasonably well by many candidates although some of the answers were brief.

- Q12** Groups of companies present consolidated financial statements that present them as a single economic entity, [1]
but they are not legally obliged to support one another. [1]
In the event of the customer's failure, the remainder of the group could simply permit the subsidiary to go into liquidation. [1]

Many groups would be reluctant to permit a subsidiary to fail, in this manner because it would generate significant bad publicity. [1]

It could easily cost the group more to deal with the damage to reputation and the concerns expressed by other business contacts than it would to rescue the failing subsidiary. [1]

A potential lender could easily ensure that the group would settle any unpaid balance by demanding a written guarantee from one or more fellow group members. [1]

[Max 5]

This question was done well by many candidates.

- Q13** All four of the elements that are being excluded from the figure are potentially highly subjective. [1]
Analysts are concerned that the board of a company that wishes to overstate profits might, for example, make very optimistic assessments of asset lives for the sake of depreciation or amortisation. [1]
The resulting figures are, therefore, based on figures that are relatively objective and so should be more directly comparable. [1]

The danger is that analysts may be misstating performance because these costs may be a significant proportion of the total. [1]

There is little point in having comparable performance figures if they grossly overstate the earnings of, say, companies in a very capital intensive industry where depreciation is a major economic matter. [1]

[Total 5]

This question was done well by many candidates.

- Q14** The investor may benefit from this arrangement because the companies may be at an early stage of development and their founders may be prepared to accept a relatively small amount for the shares. [1]
There could be significant capital gains from these companies. There is, however, a significant potential for diversification so that the risks are not excessive. [1]

Unquoted companies are less regulated and are required to provide less corporate information, so the investor may make decisions based on wrong or incomplete data [1]

The fact that the companies are unquoted may make it difficult for the investor to exit when the time is right. [1]

It may be that the founders will be keen to buy back their shares at a considerable premium in order to retain control. [1]

Failing that, it will be necessary to invest considerable time and effort in order to find a potential buyer and then to negotiate a mutually acceptable price. [1]

[Max 5]

Many candidates gave a very brief answer to this question.

Q15 The capital markets generally gather and process information concerning expectations of future performance. [1]

Market participants compete to identify speculative opportunities to buy or sell mispriced securities, [1]

which creates an incentive to study all information that becomes available. [1]

The share price will fall in the event that a company's performance is disappointing. [1]

That provides directors with a visible indication of how they are being perceived, which may motivate them to work harder. [1]

There is also a possibility that the declining share price will make the company a tempting target for takeover, which could lead to the directors losing their jobs. [1]

[Max 5]

Candidates performed well in this question.

Q16 The scrip issue effectively converts retained earnings into share capital, [1]
which increases the number of shares and reduces the share price in the process. [1]

Any fall in the share price could make it impossible to issue further shares if the market price is below the nominal price per share. [1]

Thus, creating the issue implies a belief that the share price will not decline to below the nominal value. [1]

Scrip issues are also associated with certain other future events and so they can have an implied significance. [1]

For example, the directors sometimes aim to maintain the dividend per share after the increase in the number of shares due to a small scrip issue, making the shares a little more valuable. [1]

[Max 5]

This question was done very well by candidates.

- Q17** One interpretation of the Modigliani and Miller model is that shareholders may suffer a loss because of tax if a company changes its dividend policy. [1]
Jolt's shareholders clearly prefer capital gains to dividends and so they will suffer a significant tax charge if a dividend is paid without giving them the opportunity to make arrangements. [1]

Jolt should not retain significant cash balances [1]
if there are no investment opportunities available in order to put them to work [1]
It may be better for Jolt to inform the markets that the industry is not in a suitable condition to make additional investments and so it will be making a significant dividend payment in due course [1]
The shareholders can then realise some or even all of their equity by selling the shares in advance of the dividend, selling to shareholders whose circumstances lead to them having a preference for dividend income. [1]
[Max 5]

This question was done reasonably well by many candidates. There were also some weaker candidates who wrote very little in their answers.

- Q18** The difference between the two EPS figures is a measure of the extent to which Derek's investment may be diluted [1]
through the exercise of warrants or other financial instruments [1]
Derek holds a significant shareholding and so his investment's value may be diminished in the event that these rights are exercised [1]
However, Derek will focus primarily on the company's past performance in order to inform him about the company's profitability [1]
The basic EPS is a more relevant figure for determining how effective the board has been in managing the equity invested by Derek and the other shareholders [1]
The diluted EPS is more of a "worst possible case" that might reflect how Derek's investment would have performed if the holders of warrants, etc. had exercised their rights to buy shares at a fixed price [1]
[Max 5]

This question was done badly by many candidates. Few candidates discussed EPS in any depth.

- Q19** (i) The lenders will be aware that Planet's performance is largely under the control of a third party. [1]
Planet's revenue could decline in the event that the car company runs into difficulty, even if Planet itself is performing well. [1]
There is also the risk that Planet will be replaced by a cheaper or more attractive competitor. [1]

The lender knew that its cash would be invested in particular assets, as indicated during the loan negotiations. [1]

These assets are unlikely to be readily convertible back to cash in the short term and without incurring a loss. [1]

It was also clear that Planet would be highly geared, no matter what. [1]

- (ii) If the bank forecloses on the loan then it would appear that it will receive a maximum of \$85m from the sale of property. [1]

The remaining assets may be difficult to sell for anything like their book values. [1]

The licences may have little or no value in themselves. If Planet cannot trade profitably using them then they are unlikely to find a buyer. [1]

The plant and equipment will probably be highly specialised and, again, the market may be limited. [1]

There is a very good chance that the bank will lose a significant portion of its \$150m if it forces Planet out of business. It will stand more chance of being repaid if it supports Planet through this difficulty. [1]

The bank may also wish to avoid the adverse publicity associated with forcing a major employer out of business [1]

If it acquires a reputation for ruthlessness then it might deter other customers from applying for loans. [1]

- (iii) Planet's main concern should be to draw up a plan to show how it intends to generate future cash flows from which to keep up with the payment of interest and the repayment of capital. [1]

A cash budget that indicates a realistic prospect of keeping up with the loan schedule will help. [1]

Planet should list its assumptions and generate as much evidence as possible with which to support them. [1]

For example, correspondence with the car manufacturer may demonstrate that the potential demand for parts is healthy. [1]

The assumptions that cannot be supported in this way should be realistic and should err on the side of caution. [1]

Planet may benefit from being able to offer the bank additional reports on its performance in order to give the bank some reassurance that the board is confident. [1]

Agreeing to a period of enhanced scrutiny may demonstrate that Planet's directors are confident in their ability to service the loan. [1]

[Total 20]

This question was done quite badly by many candidates. The average mark was lower than for other questions. All parts were equally poor. Most candidates did not write enough to gain high marks.

Q20 (i) (a) Trell plc
Statement of Profit or Loss for the year ended 31 August 2016

	£000
Revenue	28,749
Cost of Sales	(13,312)
Gross profit	15,437
Distribution Costs	(3,162)
Administrative Expenses	(2,952)
Operating profit	9,323
Finance costs	(123)
Profit before tax	9,200
Income Tax Expense	(2,470)
Profit for the year	6,730

[10]

(b) Trell plc
Statement of Financial Position as at 31 August 2016

	Notes	£000
Non-current assets		
Property, plant and equipment	(1)	12,933
Current Assets		
Inventory	(2)	4,306
Trade receivables		2,088
Investments		102
		<u>6,496</u>
Total assets		<u>19,429</u>
EQUITY AND LIABILITIES		
Equity		
Called-up share capital		2,160
Share premium account		720
Revaluation reserve		3,746
Retained earnings		8,170
Total equity		<u>14,796</u>
Current liabilities		
Bank overdraft		1,008
Trade payables		1,155
Tax		2,470
		<u>4,633</u>
Total of equity and liabilities		<u>19,429</u>

[5]

Notes:

(1) Property, plant and equipment

	<i>Property £000</i>	<i>Plant and machinery £000</i>	<i>Total £000</i>
Cost or valuation			
At 31 August 2015	4,320	11,340	15,660
Adjustment on revaluation	1,680		1,680
At 31 August 2016	6,000	11,340	17,340
Depreciation			
At 31 August 2015	1,980	2,139	4,119
Charge for year	86	2,268	2,354
Adjustment on revaluation	(2,066)		(2,066)
At 31 August 2016	-	4,407	4,407
Net book value			
At 31 August 2016	6,000	6,933	12,933
At 31 August 2015	2,340	9,201	11,541

(2) Inventories

£000

Inventories comprise:

Raw materials	1,260
Work in progress	916
Finished goods	2,130
	<u>4,306</u>

Workings:

Cost of sales

Overheads	2,664
Wages	2,880
Opening inv – raw materials	1,332
Opening inv – work in progress	1,476
Opening inv – finished goods	2,304
Purchases	4,608
Closing inv – raw materials	(1,260)
Closing inv – work in progress	(916)
Closing inv – finished goods	(2,130)
Depreciation – equipment	2,268
Depreciation – factory	86
	<u>13,312</u>

Distribution

Bad debts	159
Selling and advertising	1,779
Salaries	1,224
	<u>3,162</u>

Admin

Office expenses	1,440
Salaries	1,512
	<u>2,952</u>

- (ii) The valuation will be far more current than the historical cost, so the shareholders will see the true value of the assets at the directors' disposal. [1]
- That will give them a better indication of the resources at the board's disposal and so they will see how their investment is being managed. [1]
- The valuation will be far more subjective than the depreciated historical cost. [1]
- The valuation could be open to manipulation or could be misstated through a legitimate error. [1]
- The valuation could require expensive consultancy fees, increasing the cost of compiling the financial statements. [1]
- [Total 20]

Part (i) was done extremely well by most candidates. Part (ii) was not especially well answered with many candidates failing to write more than two or three lines.

END OF EXAMINERS' REPORT