Institute and Faculty of Actuaries

How to pass the exams!

A very effective way of appreciating what is required to pass an exam is to see a script from the point of view of an examiner.

This exercise on the next pages aims to help you do so. It also gives some hints and tips provided by seasoned exam counsellors and examiners.

The exercise is based on a number of similar sessions which have been delivered to actuarial students.

Marking exercise

Contained here are:

- A typical exam question
- The marking schedule for this question
- A sample student solution (typical of solutions seen during exam counselling)
- A sheet to record your marking and observations

These examples are based on a CT2 exam question, but the subject used here is incidental to the key messages of this exercise.

Part 1

Study the exam question and the marking schedule, and then mark the sample solution provided. Fill in your marks and observations on the marking sheet.

This will take about 30 minutes. You need to form a clear view on what has gone wrong with the sample student's approach.

You may prefer to arrange to do this exercise with fellow students, discussing your views with them.

Part 2

Compare your marks and comments with the sample solution, with examiner's marks and comments to be found on the website at:
http://www.actuaries.org.uk/students/pages/how-pass-exams

EXAMINATION

8 April 2005 (am)

Subject CT2 — Finance and Financial Reporting Core Technical

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*

2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*

3. *Mark allocations are shown in brackets.*

4. *Attempt all 20 questions. From question 11 onwards begin your answer to each question on a separate sheet.*

5. *Candidates should show calculations where this is appropriate.*

Graph paper is not required for this paper.

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator.

20 You have been asked to advise on the distribution of the assets formerly owned by a recently deceased client. The client had owned all of the shares of a large but unquoted limited company, a large house and a substantial bank balance. His will had left everything to his two sons, to be shared equally "in a manner to be agreed by both". The sons have agreed that one will take the house and the other the company. They have agreed a valuation for the house, but cannot agree on the value to be attached to the shares. This valuation is important because it will affect the manner in which the bank balance will be split.

The sons have provided you with the company's most recent financial statements. The son who will take the house has argued that the company should be valued by taking the profit according to the latest year's profit and loss account and multiplying it by the price/earnings ratio of a quoted company in a similar line of business. The son who will take the company feels that it would be more appropriate to value the company at the net assets figure according to the balance sheet. Both sons have provided figures based on their respective methods and these differ widely.

(i) Explain the relevance of each of the two methods proposed by the sons to the valuation of this company. [8]

(ii) Indicate, with reasons, which method is likely to give the higher figure. [2]

(iii) Explain whether the information in a typical company's financial statements is sufficiently reliable to provide the basis for an objective valuation of the company. [5]

(iv) Explain why an unquoted company should be required to prepare financial statements. [5]

[Total 20]

END OF PAPER

EXAMINATION

April 2005

Subject CT2 — Finance and Financial Reporting
Core Technical

SAMPLE MARKING SCHEDULE

20 (i) The valuation on the basis of profit times a notional price/earnings ratio takes account of the future earnings potential of the company. [1]
Arguably, the P/E ratio effectively discounts all future earnings back to their NPV. [1]
This approach could be influenced by the accounting policies of the companies involved [1]
but is otherwise theoretically sound because nothing is omitted from the calculation. [1]

The P/E model ignores the possibility that the deceased proprietor may have had a substantial input into the earning capacity of the business. [1]
His absence may reduce future profits. [1]
It also ignores the possibility that the son who inherits the business may have to work full-time in order to bring about the future profits and this model would include the value of his labour along with the inherent value of the company. [1]

The asset based valuation restricts the valuation to those assets that can be measured in the financial statements. [1]
It ignores factors such as goodwill and staff skills. [1]
It is also highly open to influence from accounting estimates and assumptions. [1]

The asset basis may be more appropriate if the business is to be sold as it stands and if the new owner will have to replace the input provided by the founder. [1]

(ii) Given that the P/E model takes account of all of the future cash flows and profits, [1]
it would normally give a much higher valuation than the asset basis. [1]

(iii) With most information gathering systems there is normally a trade-off between reliability and cost. [1]
Financial statements are prepared on the basis of historical costs because these can be determined reasonably quickly and easily. [1]
They are not necessarily the most relevant basis for most decisions, but it is argued that they are generally prepared for stewardship purposes [1]
and so any inaccuracy is unlikely to undermine their relevance.
Past performance is not necessarily a guide to future performance, and it is future performance that is relevant to valuations. [1]

The financial statements are generally prepared on the basis of highly subjective estimates about such issues as asset lives. [1]
These could have a significant impact on the profit figure and balance sheet valuations, all of which could affect any company valuation. [1]
Typically, financial statements omit balances, such as internally generated goodwill, [1]
which would be difficult to value in any meaningful way. That further undermines their relevance to company valuations.

(iv) All companies confer the privilege of limited liability on their owners. [1]
It is important that anyone dealing with the company has some protection from the potential abuses associated with limited liability. [1]
Reliable financial statements are one such source of protection, particularly when combined with agreements that can be expressed in terms of accounting numbers. [1]
For example, a bank might grant a loan in return for an agreement that the gearing ratio will be kept below a particular percentage. [1]

The financial statements enable shareholders to make decisions about their relationship with the company. [1]
They can decide whether to support the present management or call for a change on the basis of the figures in the annual report. [1]
Companies also require financial statements in order to pay tax. [1]
It would be difficult for tax authorities to know how much to levy without formal financial statements. [1]

END OF SAMPLE MARKING SCHEDULE

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Sample marking exercise

CT2 April 2005 question 20: Sample student solution

(i) Price/ earnings ratio = P/E ratio
= market value of ord shares / earnings per share

Value of company
= P & L profit x P/E ratio
so is good indication of value of company

Net assets figure
= all assets – all liabilities
taken from balance sheet
so is what company is worth as it stands
but may be distorted because of accounting practices and this could be true for the other measure too which takes an ongoing view.

(ii) First measure gives a much higher valuation.

(iii) The financial statements are made up of:
- A balance sheet showing the financial position on the last day of the company's financial year
- A profit and loss account for the financial year
- Detailed disclosures which are normally presented as a series of notes to the accounts
- A directors' report
- An auditor's report

These must give a true and fair view and be signed off by an auditor and follow accounting standards and use lots of accounting concepts eg cost concept, money measurement concept, going concern concept.

If the auditor does not agree he will issue a qualified opinion – an adverse opinion is issued if the auditor does not feel that the accounts give a true and fair view. He may issue a disclaimer of opinion if he cannot obtain sufficient information.

Ran out of time ….

(iv) Financial statements have four groups of users:
- Equity investors
- Loan creditors
- Employees
- Business contacts

There are also other reasons why a company prepares financial statements eg

i. For stock exchange requirements
ii. For tax
iii. So that investment analysts can form a view
iv. For shareholders
v. It is important that all companies show the same amount of information so that the financial markets can proceed in an orderly fashion and that they can be regulated properly.

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Sample marking exercise

Marking and observations

Marks awarded	
(i)	
(ii)	
(iii)	
(iv)	
Total	

Observations	
Use of questions	
Evidence of planning	
Clarity of answers	
Recall of bookwork	
Application of bookwork	
Length of answer	
Use of time	