INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

23 April 2012 (pm)

Subject SA4 – Pensions and other Benefits Specialist Applications

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 have 15 minutes before the start of the examination in which to read the question. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*

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

4. *Mark allocations are shown in brackets.*

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

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 from the approved list.

Supportive Office Chairs plc ("the company") is a large, long established, office furniture supply company listed on the London Stock Exchange. The business has traded profitably for many years and has a range of contracts to supply large, well known and successful businesses both in the UK and abroad. In the last accounting year, it had the following key results:

Turnover:	£240m
Profit before tax:	£6m
Total Net Assets:	£45m
Assets include:	£21m (cash at bank)
	£16m (head office & central warehouse)
	£30m (furniture stock)
	£44m (debtors)

The company operates a long-standing defined benefit pension scheme ("the scheme") for the majority of its UK employees. The scheme has approximately 2000 members, with a broadly even split between active, deferred and pensioner members. It provides members with a pension on retirement at age 65 based on service to, and salary at, retirement or earlier date of leaving employment. Benefits are subject to statutory minimum revaluation in payment and, for early leavers, in deferment, although powers exist to grant discretionary increases in addition to this. The last valuation three years ago identified a deficit, on an ongoing basis, of £5m. As well as funding ongoing accrual, the company has been paying contributions at the rate of £1.5m p.a. to fund that deficit.

The Scheme Actuary has been asked to prepare the scheme's statutory triennial actuarial valuation.

(i) Outline the legislative requirements for this statutory valuation. [5]

The scheme assets are invested as follows:

Equities:	50%
Corporate bonds:	28%
UK government debt:	10%
Property (direct investments):	10%
Cash:	2%

(ii) Outline the additional information the Scheme Actuary will require to carry out the valuation. [8]

(iii) Discuss the economic and demographic assumptions the Scheme Actuary will need to make. [10]

At the valuation date, the following market yields applied:

Over 15 year gilt yield:	4.5%
Over 15 year index-linked gilt yield:	1.2%
Over 15 year AA bond yield:	5.7%

(iv) Propose values for the economic assumptions, giving reasons and stating any further assumptions you have made. [5]

(v) Propose, with reasons, suitable values and tables for the key demographic assumptions, together with any adjustments that the trustees might consider. [3]

The valuation has now been completed and the results are as follows:

Liabilities	*Value (£m)*
Actives	82
Deferreds	53
Pensioners	75
Total Technical Provisions	210
Total Assets	195
Deficit	15

(vi) Discuss, in detail, the key considerations for the trustees in setting out a strategy to fund the scheme deficit and calculate possible contribution requirements to address the funding shortfall. Your answer should make reference to the financial information available about both the scheme and the company. You do not need to calculate the contribution rate for future pension accrual. [12]

The initial results of the valuations have been presented to the trustees, but no revised information has, as yet, been disclosed in the Company Accounts. There has now been a downgrading of the company's credit rating which has raised concerns for the trustees. They have asked the company for an explanation of the downgrading. The company has replied that the main reasons are:

- there has been a general downgrading of the market sector the company operates in as a result of general economic conditions; and

- one of the company's largest clients recently went into liquidation.

The company has also stated that:

- they are confident that their trading position is significantly better than the market average;

- they are close to securing new clients who will provide more than enough revenue to replace that lost from the client who went into liquidation; and

- they have a significantly stronger than average balance sheet for the sector.

The company has therefore advised the trustees that they should not be concerned by the downgrading. The trustees have asked the Scheme Actuary what action they should take.

(vii) Outline how the trustees should react to this information. [4]

The trustees have decided that the covenant of the company is not as strong as they had initially assumed. They have asked the Scheme Actuary what changes should be made to the way they are managing the scheme as a result.

(viii) Discuss the potential changes that the trustees may wish to make. Your answer should include the implications for:

- Investments
- Scheme benefits
- Funding objectives

[7]

Following this review of their assessment of covenant, the trustees have decided to take a significantly more prudent approach to funding the pension scheme. They have asked the Scheme Actuary to recommend changes to the economic assumptions being used for the funding valuation as a result.

(ix) Suggest, with reasons, revised values for the key economic assumptions. [4]

(x) Based on the changes you proposed in part (ix), calculate an estimate of the revised deficit, explaining any further significant assumptions you make. [7]

(xi) Discuss how this revised deficit might be eliminated, explaining the differences to your answer to part (vi). [4]

The trustees have agreed with the company upon a revised basis and plan for recovering the deficit with the company. The Scheme Actuary is now required to formalise that agreement.

(xii) List the documents that the Scheme Actuary, the trustees and the company are required to complete. [3]

(xiii) Explain how the actuarial standards on reporting apply to any reporting documents that the Scheme Actuary completes. [4]

The company has now been acquired by its main competitor, Regal Desks plc (“the purchaser”) which sponsors a similar arrangement (“the Regal scheme”) to provide pension benefits to its employees. It is intended that the benefits of the scheme will be transferred into the Regal scheme as part of the sale process. The purchaser has agreed a provisional price of £300m for the company with all aspects of the deal, including pensions, being set out in a Sale & Purchase Agreement.

(xiv) Describe the Sale & Purchase Agreement and, in particular, the sections relating to the pensions aspects of the sale. [5]

(xv) Outline the main interests of the purchaser in the terms of the sale that relate to pensions. [4]

The pension scheme transfer has now been completed. As part of the deal, a significant single contribution was made to the combined Regal Scheme. The assets and liabilities of the Regal Scheme are now as follows:

Liabilities	*Value (£m)*
Actives	138
Deferreds	113
Pensioners	140
Total Technical Provisions	391
Total Assets	385
Deficit	6

The Scheme Actuary to the Regal Scheme has estimated that the liabilities on the Section 179 valuation basis used by the Pension Protection Fund (PPF) are approximately 72% of the Technical Provisions. The PPF assessment of the one year risk of insolvency is 0.25%.

(xvi) Estimate the Regal scheme's PPF risk based levy on the 2011/12 basis. [3]

The purchaser is concerned about the size of the overall pension liabilities and the potential impact on its balance sheet of the volatility of the Regal Scheme's funding following the transfer of liabilities.

The purchaser has asked an independent actuary to prepare a report on the four main actions that it could take, either independently or in combination, to limit the absolute amount, and control the volatility, of the liabilities on the purchaser's balance sheet.

(xvii) Discuss the points the independent actuary might make in that report, setting out the advantages and disadvantages of each proposed action. [12]

[Total 100]

END OF PAPER