EXAMINATIONS

9 September 2003 (pm)

Subject 201— Communications

Time allowed: 1½ 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 at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have 1½ hours to complete the paper.*

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

4. *Attempt EITHER question 1 OR question 2 but NOT BOTH questions.*

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 Actuarial Tables and your own electronic calculator.*

1   You are the actuary to a defined benefit pension scheme. A member of the pension scheme has written to the trustees querying a transfer value quoted to her in June 2003 as follows:

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10 London Road
Anytown

1 August 2003

Dear Sir/Madam,

Ref: XYZ Pension Scheme

I recently requested a valuation of my pension benefits from the XYZ pension scheme as I have been reviewing my finances. You sent me a statement in June 2003 which stated that a pension of £1,300 p.a. will be payable when I retire at age 60. The transfer value of this pension was £24,000 as at June 2003.

I also received a valuation from you in June 2000. At that time my pension was stated to be £1,200 p.a. payable on retirement at age 60 and the corresponding transfer value was £24,000.

I am surprised to see that the transfer value has not changed over the 3 years although the amount of pension has increased. I would have expected the transfer value to increase in line with the amount of pension.

Please explain this discrepancy as I fail to understand why the transfer value remains unchanged.

Yours faithfully,

Jane Brown

The trustees have forwarded a copy of the letter to you and asked you to draft a response.

Draft a reply to the member in about 500 words to explain why the transfer value did not increase between June 2000 and June 2003.

Notes:

1. The transfer value, before any adjustment under note 4. below, represents the present value of the future pension payments and is directly proportional to the amount of a member's pension. It also increases as a member's age increases primarily because there is a shorter period prior to retirement age.

2. Further, the basis on which transfer values are calculated changed between June 2000 and June 2003 due to changes in relevant investment markets over that period. The main change has been to reduce the assumed rate of future investment returns. This has resulted in an increase in transfer values.

3. These factors increased the transfer value from £24,000 in June 2000 to £32,000 in June 2003.

4. The last actuarial valuation of the scheme as at 1 January 2002 showed that there was a deficit in the pension scheme of 25% caused by lower than anticipated investment returns. At the previous actuarial valuation there had been no deficit. As a result, until the deficit is eliminated, the trustees of the scheme are now reducing all transfer values by 25%.

5. You should assume that there have been no changes in the benefits provided by the scheme and the employer remains committed to the scheme.

6. You are not expected to set out the details of how transfer values are calculated or how the calculation basis is determined.

7. You should assume that there are no regulatory or other constraints on the information and explanations you can provide.

PLEASE TURN OVER

2　You are employed by a life insurance company. The company is developing a new product to enable retired people to release part of the value of their homes to provide a regular income.

The product operates by offering a loan equal to a proportion of the value of the property. The rate of interest on the loan is fixed. Part of the loan is available immediately as a lump sum. The remainder is used to provide a fixed annuity for the lifetime of the borrower. A key feature is that the annuity, after payment of any tax due, must be sufficient to cover the interest on the loan. On the borrower's death, the annuity ceases and the amount of the loan is recovered from the value of the property.

The draft marketing literature illustrates the concept using an example of a 70-year old widower. It is assumed that the property is currently valued at £120,000 and the widower wishes to borrow £60,000 with £10,000 being taken as a lump sum and £50,000 used to provide the annuity. Interest would be charged on the loan at 5% per annum. The annuity would be £5,000 per annum. The annuity would, however, be taxable at a rate of 10% leaving a net amount of £1,500 per annum after tax and interest payments.

The company's marketing director has reviewed the literature and has voiced to you some concerns that the product appears to offer very poor value.

- In particular, if the widower lived for, say, 15 years, the total amount he would receive would be less than £35,000 — much less than the £60,000 he might have expected.

- In fact, he might have expected more than £60,000 as he has given up half his home, which would be expected to increase in value.

- In addition, taxing the annuity seems unfair, as this is just his own money being returned to him.

Draft a memorandum to the marketing director in about 500 words to explain the flaws in his analysis.

Notes:

1. You may assume that in the illustration a life expectancy of 15 years is about right. You need not consider the effect on value for money if the borrower lives for a longer or shorter period than expected.

2. The loan is for a fixed amount and is not linked to the property value. You need not consider the risk that the property might fall in value to a point where it might not cover the repayment of the loan.

3. Tax on the annuity is at a substantially lower rate than tax on, for example, earnings. This reflects the fact that part of each annuity payment represents, in effect, a return of capital (which is tax-free) to the annuitant and part represents interest on the capital (which is taxable). You need not consider the risks of future changes in taxation.

4.   You need not consider possible alternative designs of product such as a variable interest rate on the loan or an annuity that increases in payment.

5.   You need not consider finer detail such as the frequency with which annuity or interest payments are made.