

EXAMINATION

1 September 2010 (am)

Subject A302 — Communications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

- 1. Enter all candidate and examination details as requested on the front of your answer booklets or at the bottom of your typed solution to each question.*
- 2. You have 30 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 three hours to complete the paper.*
- 3. You may not start writing your answers in the booklet or typing on the computer until instructed to do so by the invigilator.*
- 4. Approved calculators may be used, but all memories and user-supplied programs must be cleared before you begin the examination.*
- 5. Mark allocations are shown in brackets.*
- 6. Attempt both questions, beginning your answer to each question on a separate sheet.*

AT THE END OF THE EXAMINATION

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

<p><i>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.</i></p>
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Question 1

Your firm, Diversified Actuarial Services, has been contracted by the Pofadder Debt Counsellors' Association to explain to their clients how to choose the cheapest loan provider.

Until recently, there were only 2 loan providers in Pofadder. Providers X and Y both quote effective interest rates to their clients. However, X quotes an effective monthly rate, whilst Y quotes an effective annual rate.

The Association's clients are unable to determine which provider charges the least amount of interest. In one instance, a client needed a loan of R226 562. He borrowed money from X at an effective monthly interest rate of 1%. He was under the impression that, in total, he would pay less interest than if he had borrowed the money from Y at an effective annual interest rate of 12,5%.

You have learned that a new loan provider, Z, has just entered the market and is quoting a nominal interest rate of 13,2% p.a., convertible monthly. X and Y are currently quoting rates of 1,2% p.m. and 13% p.a. respectively.

Draft a presentation, consisting of 7 to 9 slides, to the Association's clients, mentioning the different ways in which interest rates are quoted in Pofadder and explaining how to determine the cheapest loan provider. Include a comparison of the current interest rates on offer.

You should assume the following in your reply:

- The Association's clients, who include shop assistants and mechanics, only understand the following basic mathematics: operators (+, −, × and ÷) and percentages.
- Y only quotes interest rates in multiples of 0,5% and restricts its quoted rates to the 3% to 20% range. You have prepared a handout showing equivalent effective monthly interest rates for the effective annual rates in this range which you intend to present to the Association's clients. The handout will be referred to during the presentation.
- X and Z quote rates in any multiple of 0,1%.
- Your presentation should be restricted to the current loan providers in Pofadder.
- Pofadder's loan providers all require monthly loan repayments and will continue to quote interest rates in the same manner that they currently do.
- Each loan provider offers a single interest rate to all their clients, irrespective of that client's credit worthiness or the size of the loan.
- For presentation purposes, interest rates need only be quoted to 1 decimal place.

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Question 2

You are the Red Company's Retirement Annuity Product Manager. When clients buy a Retirement Annuity (RA) from the Red Company, they become members of the Red Company Retirement Annuity Fund. The investment of the Fund's assets is governed by Regulation 37.

Regulation 37 specifies parameters for the prudential investment of retirement assets. It aims to protect South African individuals against poorly diversified portfolios as well as portfolios that do not match the risk profile of the investor. Restrictions apply per asset class and country of investment.

Regulation 37 is currently applicable to the Red Company Retirement Annuity Fund at Fund level. For this purpose:

$$\begin{aligned} & \text{Fund holding in asset class } x \\ &= \sum_{RA \text{ holders}} \sum_{Investment \text{ country}} \text{Rand amount invested in asset class } x \end{aligned}$$

$$\begin{aligned} & \text{Fund holding in investment country } x \\ &= \sum_{RA \text{ holders}} \sum_{Asset \text{ class}} \text{Rand amount invested in investment country } x \end{aligned}$$

Regulation 37 has been revised. Revisions come into effect on 1 December 2010. Investment restrictions now apply at individual RA holder level. In addition, the investment maxima have been somewhat revised and will be as follows:

- No more than 75% may be invested in equities.
- No more than 25% may be invested in foreign countries.

Foreign countries are specified as any place outside of South Africa.

A large number of RA clients will have to restructure their investments to meet the revised Regulations. This is particularly true of your high net worth clients, who tend to invest less prudently than the majority of clients. A number of high net worth clients are very heavily invested in equities.

You view the revision of Regulation 37 as an opportunity to interact with these clients. It is important that they feel that their personal circumstances and risk-return preferences are being catered for. The Red Company has instructed its intermediaries to contact all clients impacted by the revised Regulation by the end of October 2010 so that any necessary changes can be implemented before the deadline.

Draft a letter of between 450 and 500 words dated 1 September 2010 to Ronald Big, a Red Company RA client impacted by changes to Regulation 37. Explain why and how he is impacted by the Regulation 37 revisions. Use an example to clarify the shift of investment restrictions from Fund level to individual RA holder level.

You may assume that Ronald:

- holds more than 25% and 75% of his portfolio in non-South African assets and equities (as specified in the Regulations) respectively; and
- is impacted by the changes to Regulation 37 only to the extent that has been specified above.

Notes:

- Ronald's sole retirement provisions are individual Red Company RAs.
- RAs are a retirement savings vehicle. Individuals invest lump sums and/or regular contributions in their RA. The RA matures on an individual's retirement – any time after the age of 55.
- RA contributions are invested in various asset classes and countries according to client specifications. The maturity value of the RA depends on the underlying asset values at the date of retirement.
- Your computer system will populate the letters with actual investment percentages held on 1 September 2010 (in Rand terms). Indicate by means of "...%" when such population is required in the letter.
- A wide range of investment options, both per asset class and country, are available to RA clients.
- You should not mention what will happen if clients fail to restructure their investments in time.
- Administration fees will be waived on any investment switches initiated as a result of the revised Regulation.
- Create a client address and intermediary name where necessary in the letter.
- All clients are serviced by Red Company intermediaries.
- A hotline (0860 345 0987) has been set up to deal with Regulation 37 queries. It is operated from Monday to Friday from 8 in the morning till 6 in the evening.
- The clients are already committed to saving for retirement and it is not anticipated that the revisions to Regulation 37 will affect this.

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Total [100]