EXAMINATION

6 October 2009 (pm)

Subject SA1RSA — Health and Care 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 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 must not start writing your answers in the booklet until instructed to do so by the supervisor.*

4. *Mark allocations are shown in brackets.*

5. *Attempt both questions, beginning your answer to each question on a separate sheet.*

6. *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.

QUESTION 1

MultiTrade is a large holding company with diversified subsidiaries and an employee base spread across the country. All of the holding company's employees are members of the company's closed medical scheme, TradeMed. Employees are entitled to a post-retirement medical contribution subsidy of 50% of the contribution of the option to which they and their dependants belong. This subsidy continues to the dependants of deceased employees, and of those who go on early or ill-health retirement. The PRMA liability is disclosed on MultiTrade's balance sheet.

TradeMed has two options:

- HighPlan which provides full cover for in and out of hospital care with an average contribution of R3 100 per family per month; and
- MidPlan which provides full cover for in hospital care and Prescribed Minimum Benefit cover for out of hospital care, with an average contribution of R1 550 per family per month.

As at 30 June 2009 the accumulated funds of the scheme amounted to R160m.

On 1 July 2009 MultiTrade unbundled and sold all but one of its subsidiaries. Since TradeMed is only open to MultiTrade employees and their direct families, many of the members of the scheme have left. The table below gives key characteristics of the scheme's membership just before and just after the unbundling.

	30 June 2009	1 July 2009
Number of families	18,750	3,120
Number of beneficiaries	45,000	6,552
Proportion of families on HighPlan	30%	70%
Average age of beneficiaries	31	43
Pensioner ratio (as a percentage of beneficiaries)	6%	41%
Proportion of beneficiaries with a chronic condition	11%	52%

i. Discuss the effects of the unbundling on the medical scheme, and on the post retirement medical liability of the employer. [11]

TradeMed now approaches a large open medical scheme, MedicAll, with a proposal to merge.

ii. Outline the legal and practical steps that must be taken under the Medical Schemes Act when considering a merger between two schemes. [4]

PLEASE TURN OVER

MedicAll decides to decline the merger.

The Trustees approach MedicAll again with a request to merge, but this time they want to provide an undertaking to make an additional cash injection (provided by MultiTrade) into MedicAll at the date of the merger, to compensate MedicAll for the unfavourable demographic profile of the membership.

iii. Discuss how you would evaluate the additional amount proposed by the employer. [21]

MedicAll and TradeMed cannot agree on the quantum of the cash injection, and the merger is again opposed by MedicAll. In response to this, the Trustees of TradeMed are considering liquidation of the scheme.

iv. Discuss the options MultiTrade has for providing healthcare benefits to its remaining employees, and the implications for the members of the scheme of a liquidation if it goes ahead. [14]

Total [50]

PLEASE TURN OVER

QUESTION 2

You are a consulting actuary advising a large medical scheme. The Scheme is currently experiencing a high increase in hospitalisation costs (i.e. in claims costs submitted by hospitals, as opposed to claims submitted by other service providers, such as specialists, in respect of patients in hospital), and is asking for advice on various strategies to contain this increase.

The Board of Trustees has been approached by a medium sized hospital group seeking to grow and expand. This group has hospitals in all the major provinces, and is well represented in Gauteng and Kwa-Zulu Natal. However, they have only one hospital in the Western Cape, in Cape Town. The Scheme's members are spread across the country in all the provinces.

The hospital group has suggested that the Scheme purchases a 51% share in the hospital group. The management of the hospital group is suggesting that this will allow the Scheme to control the profit margins in the hospital. This will allow the Scheme to control hospital costs. Also, the Scheme could channel its members to this hospital group and therefore realise these savings. The capital raised in this way will be used by the group to purchase or build more hospitals, with a particular strategy to expand in the Western Cape. In this way, the hospital group hopes to compete with the three dominant hospital groups in the market, and to offer lower margin services to more members.

The hospital group is currently in the hands of private shareholders and is not listed. Its claims costs recently have also increased at a high rate, but somewhat lower than the cost increases of the other three hospital groups. Its average occupancy level is 55% currently.

The Scheme you are advising is the largest in the market, with a 30% market share, and accumulated funds of R6bn, representing a statutory solvency ratio of 31%. All of the assets are currently invested in cash and money market instruments.

Whilst a due diligence has not yet been performed, the management of the hospital group has suggested that they believe the 51% share is worth R2bn, and this valuation is based on the expected future profit margins of the group, based on past experience.

PLEASE TURN OVER

You have been asked to draft a high level initial report on whether the Trustees should make use of this opportunity.

i. Evaluate the hospital group's rationale for the transaction and discuss any other advantages and disadvantages of this transaction to the Scheme. Make a recommendation on whether the Trustees should proceed with it or not. [11]

The Trustees decide not to go ahead with the purchase of the hospital group.

You have been asked to draft a report evaluating the increase in hospital costs from last year to this year relative to other categories of claims, for example medication costs, specialist costs and GP costs.

ii. Describe how you would perform this evaluation. Assume that you have full access to the Scheme's hospital claims data with detailed clinical coding, related specialist and medical accounts, and all necessary membership data. [11]

iii. Describe how, for the purposes of determining contributions for next year, you would project hospital costs for next year using the results of your evaluation above and any other relevant information. The Scheme has not yet agreed tariffs for next year with any of the hospital groups. [10]

Given the results of your projections, the Trustees are now investigating other strategies for handling the increase in hospital costs from last year to this year.

iv. List six ways in which medical schemes could ration health care, and six ways in which service providers could ration health care. [3]

One of the strategies that they consider is to enter into risk sharing agreements with one or more hospital groups.

v. Discuss the challenges of setting up a successful risk sharing arrangement between a medical scheme and a hospital group. [5]

PLEASE TURN OVER

vi. Discuss the challenges of providing affordable hospital cover for lower income members (e.g. those with a household income of less than R6 000 per month) within a medical scheme, and indicate how risk sharing arrangements with one or more hospital groups may help to increase affordability. [10]

Total [50]

END OF PAPER