

EXAMINATION

20 October 2014 (am)

Subject F201 Health and Care Specialist Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

- 1. Candidates will be issued with instructions to log-in using a password (which you will be provided with at the exam center).*
- 2. Candidates are required to submit their answers in Word format only using the template provided.*
- 3. Save your work continuously throughout the exam, on your computer's hard drive with which you have been provided.*
- 4. 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.*
- 5. You must not start typing your answers until instructed to do so by the invigilator/supervisor.*
- 6. Mark allocations are shown in brackets on exam papers.*
- 7. Attempt all questions, beginning your answer to each question on a new page.*
- 8. Candidates should show calculations where this is appropriate.*

Note: The Actuarial Society of South Africa will not be held responsible for loss of data where candidates have not followed instructions as set out above.

AT THE END OF THE EXAMINATION

Save your answers on the hard drive.

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.
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Question 1

You are an actuary appointed as an advisor to Anchor Medical Scheme, a medium sized open medical scheme. The Board of Trustees approved the scheme's contribution increases and benefits as well as the budget for 2015 which is shown below. It submitted these changes to the Council for Medical Schemes (CMS) for approval.

Option	R million				Consolidated
	Galleon	Frigate	Clipper	Caravel	
Contribution increase on 1 January 2015	9.50%	8.75%	8.75%	10.00%	9.26%
Average number of members during the year	34 191	9 909	12 770	2 322	59 191
Average number of beneficiaries during the year	74 587	24 434	29 602	4 986	133 608
Gross contribution income	2 987.8	655.7	646.8	42.6	4 332.9
Savings contribution income	(746.9)	(98.4)	(64.7)	-	(910.0)
Risk contribution income	2 240.8	557.3	582.1	42.6	3 422.9
Relevant healthcare expenditure	(2 427.9)	(399.7)	(345.5)	(43.7)	(3 216.9)
Gross healthcare result	(187.1)	157.6	236.6	(1.1)	206.0
Non-healthcare expenditure	(135.7)	(33.8)	(35.6)	(6.1)	(211.2)
Surplus/(deficit) from operations	(322.7)	123.8	201.1	(7.2)	(5.1)
Other income					65.0
Total comprehensive income for the year					59.9
Total members' funds as at 31 December 2015					874.8
Revaluation reserve*					(52.5)
Accumulated funds per Regulation 29					822.3
Solvency ratio					19.0%

*Cumulative net gains on re-measurement to fair value of financial instruments included in accumulated funds

The budget uses an assumption of 6.0% for the average rate of inflation of the Consumer Price Index from 2014 to 2015, as well as a utilisation increase assumption of 3.5%.

The Council for Medical Schemes has responded to the submission. The following is an excerpt from the letter sent to the Board of Trustees:

"It is noted that the financial projections of the 2015 results show that the scheme will be in contravention of the solvency and self-supporting provisions of the Medical Schemes Act, its Regulations and the guidance published by the office of the Registrar. Hence you are required to provide this office with a recovery plan as well as an undertaking by the Board to manage this poor performance going forward.

Furthermore, we question the large magnitude of the utilisation increase assumption used in the preparation of the budget and direct the scheme to provide a motivation in this regard."

The Board of Trustees has asked you to prepare a presentation outlining the possible courses of action that may be taken in order to comply with the provisions of the Act and its regulations.

- (i) Explain the principle of Social Solidarity and discuss whether full compliance with the self-supporting provisions of the Act promote this principle. [8]
- (ii) List the possible courses of action the Board of Trustees may take to make the scheme compliant with all the relevant provisions. [4]
- (iii) Discuss the implication of each action you listed in (ii) above for the scheme and its members. Show any calculations that you use in the preparation of your report and list any assumptions you make. [27]

You have also been directed to prepare an analysis of changes in utilisation to support the motivation for the assumption. Your analysis is to incorporate separate analyses of the following categories of claims:

- Consultations
- Procedures
- Medicine
- Hospital
- Pathology
- Radiology

- (iv) Describe the factors you would need to consider in analysing past utilisation trends for each of these categories and projecting them into 2015. Indicate which utilisation measure is best suited to each category. [12]
- (v) Describe the regulation that addresses the premium penalties that are allowed to be imposed on new members and dependants joining a medical scheme. [9]

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The distribution manager has raised concerns regarding the scheme's current underwriting policy. He has raised the following points:

- The underwriting policy has not been updated since 2005.
- The scheme applies the same underwriting policy to all new members, whereas competing schemes relax their underwriting policies in certain circumstances.

In addition to a full review and update, he has proposed the following changes to the underwriting policy:

- In the case of large corporate groups joining the scheme the underwriting requirements may be waived.
- Certain brokers who have always brought in new business with a good risk profile may be assigned VIP status and the underwriting requirements could be waived for all members regardless of group size. This will result in a drastic reduction in the administrative burden on the broker.

You have been tasked with a full review and update of the underwriting policy, incorporating the distribution manager's suggestions.

(vi) Explain, in the context of the actuarial control cycle, how you would use the scheme's own data in order to update and maintain the underwriting policy as suggested by the distribution manager, including the identification of members who should have a general waiting period applied. [22]

(vii) Discuss the risks created by not updating the underwriting policy. [5]

[Total 87]

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Question 2

You have been asked by an industry body to prepare a presentation discussing the long-term implications for the private healthcare funding industry in a scenario where the Medical Schemes Act and its regulations remain at the status quo for at least the next decade.

You are to consider the following topics in your preparation:

- Open enrolment and community rating
- Risk equalisation
- Mandatory cover
- The low-income market
- Prescribed Minimum Benefits
- Solvency
- Open medical schemes versus restricted medical schemes.

Furthermore, you may assume that National Health Insurance will not be implemented within this time-horizon.

(i) Discuss the scenario above with reference to the current regulatory environment. [13]

[Total 13]

[Grand total 100]

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END OF EXAMINATION