INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

27 April 2022 (am)

Subject SP1 – Health and Care Specialist Principles

Time allowed: Three hours and twenty minutes

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator.

If you encounter any issues during the examination please contact the Assessment Team on T. 0044 (0) 1865 268 873.

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1 Country X is a small developing country, with an economy dependent on mining and agriculture. Regulations in Country X require insurers to reinsure only with authorised reinsurers located in Country X. Any reinsurance arrangement with reinsurers located outside of Country X require explicit approval from the regulator.

(i) Suggest possible reasons behind the regulatory requirements for insurers to reinsure with local reinsurers only. [4]

Company A is a small health and care insurance company selling a range of health and care insurance products including Critical Illness (CI), Income Protection (IP) and Private Medical Insurance (PMI) products in Country X.

Company B is a global reinsurer located in Country Y.

Company C is a subsidiary of Company B located in Country X. Company C is authorised by Country X's regulator to operate in Country X.

Company A reinsures a significant proportion of its business to Company C.

Company B is planning on closing its subsidiary in Country X within the next 12 months.

(ii) Suggest possible reasons why Company B is closing its subsidiary in Country X. [6]

(iii) Outline the actions that Company B may take to ensure its exit from Country X is operationally smooth and financially fair to its cedants in Country X. [6]

(iv) Discuss the factors that Company A may consider in selecting a replacement reinsurer. [8]

[Total 24]

2 Hospital Group A is one of the biggest hospital networks providing a full range of medical treatments. Company B is a health and care insurance company specialising in Private Medical Insurance (PMI).

(i) Set out the key exclusions for a PMI product. [3]

The management of Hospital Group A has proposed to Company B to offer a percentage discount in premium rates on PMI policies to all patients who have had medical treatment in a hospital in Group A's network. The discount shall be funded equally by Hospital Group A and Company B. The PMI policies will cover the full cost of medical treatments in any of Group A's network hospitals.

(ii) Discuss the potential benefits and risks of the proposal from the perspective of the following stakeholders:

(a) Policyholders (past patients of Hospital Group A)

(b) Company B

(c) Hospital Group A.

[9]

(iii) Suggest measures that Company B may put in place to manage the potential risks of this proposal. [5]

The Marketing Director of Company B suggests that this offer should be extended to all the other retail customers purchasing PMI policies through Group A's network hospitals.

(iv) Discuss the potential risks, in addition to those identified in part (ii), of this proposal from the perspective of:

(a) Company B

(b) Hospital Group A.

[4]
[Total 21]

3 Company A is a specialist individual Income Protection (IP) insurance provider that calculates its annual statutory returns as follows:

- Statutory reserves are determined using a discounted cash flow approach and assumptions with margins for prudence.
- Solvency capital requirements are required to be held in addition to the statutory reserves and are determined using a risk-based capital approach by applying stress tests to each different risk factor.

Company A has just completed its statutory returns and has noted a significant increase in both statutory reserves and solvency capital requirements.

(i) Suggest possible reasons for the significant increase in statutory reserves. [9]

(ii) Suggest possible reasons for the significant increase in solvency capital requirements, in addition to those already covered in part (i) above. [7]

[Total 16]

4 The government of Country X is planning to introduce a social healthcare scheme to provide cover to all citizens whose personal wealth is below a specified threshold. The proposed healthcare scheme offers medical treatment in hospitals in an authorised network.

The scheme will be funded by a combination of an annual membership fee, payable by eligible individuals to a state-approved insurance company, and a government subsidy. The government subsidy will cover a pre-determined percentage of the medical expenses, and the membership fee will make up the balance. The membership fee and government subsidy percentage are subject to review each year in order to control the cost burden on the government.

(i) Discuss the advantages and disadvantages of the proposed scheme to the government. [6]

(ii) Discuss the advantages and disadvantages of the proposed scheme to the health and care insurers currently offering comprehensive Private Medical Insurance (PMI) products in this country. [5]

(iii) Set out the information that the government may require for its annual review of the subsidy rate. [8]

[Total 19]

5 Company A is a large health and care insurance company specialising in individual Critical Illness (CI) insurance business in Country X. In recent years, Country X has been experiencing exceptionally high levels of inflation, and the country's currency has also been depreciating against other stronger currencies. This economic trend is expected to continue for the foreseeable future.

(i) Describe the key benefits of a typical CI insurance product. [2]

The insured benefit under Company A's CI products is currently a fixed lump sum, chosen by the policyholders at policy inception. The Marketing Director is concerned that the current features of its CI products no longer meets customers' needs adequately.

(ii) Discuss the possible reasons behind the Marketing Director's concerns. [4]

(iii) Suggest changes that could be made to the product features to address the current economic environment in Country X. [4]

(iv) Discuss the factors to be considered in determining whether Company A should change the features of its CI products. [10]

[Total 20]

END OF PAPER