

P97

Diploma in Insurance

Unit P97 – Reinsurance

October 2016 examination

Instructions

- Three hours are allowed for this paper.
- **Do not begin writing until the invigilator instructs you to.**
- **Read the instructions on page 3 carefully before answering any questions.**
- Provide the information requested on the answer book and form B.
- You are allowed to write on the inside pages of this question paper, but you must **NOT** write your name, candidate number, PIN or any other identification anywhere on this question paper.
- The answer book and this question paper **must both be handed in personally by you** to the invigilator before you leave the examination room. **Failure to comply with this regulation will result in your paper not being marked and you may be prevented from entering this examination in the future.**

Unit P97 – Reinsurance

Instructions to candidates

Read the instructions below before answering any questions

Three hours are allowed for this paper which carries a total of 200 marks, as follows:

Part I	14 compulsory questions	140 marks
Part II	2 questions selected from 3	60 marks

- You should answer **all** questions in Part I and two out of the three questions in Part II.
- You are advised to spend no more than two hours on Part I.
- Read carefully all questions and information provided before starting to answer. Your answer will be marked strictly in accordance with the question set.
- The number of marks allocated to each question part is given next to the question and you should spend your time in accordance with that allocation.
- You may find it helpful in some places to make rough notes in the answer booklet. If you do this, you should cross through these notes before you hand in the booklet.
- It is important to show each step in any calculation, even if you have used a calculator.
- If you bring a calculator into the examination room, it must be a silent, battery or solar-powered non-programmable calculator. The use of electronic equipment capable of being programmed to hold alphabetic or numerical data and/or formulae is prohibited. You may use a financial or scientific calculator, provided it meets these requirements.
- Answer each question on a new page. If a question has more than one part, leave six lines blank after each part.

PART I

Answer ALL questions in Part I

Note form is acceptable where this conveys all the necessary information

1. Explain how corporate strategy affects reinsurance buying decisions for newly established insurers, including the benefits they might seek to obtain. (8)

2. A large factory with an overall sum insured of £200 million is offered to insurer A, which only wishes to retain £50 million for its own account.

Explain briefly, with an example, how the placement of the risk can be achieved, commenting on the resulting contractual relationships:
 - (a) with the support of reinsurance; (5)
 - (b) by the use of co-insurance. (5)

3. Outline how the proportional and non-proportional methods of reinsurance differ. (14)

4. Explain briefly the purpose and operation of insurance derivatives. (8)

5. State **ten** items of information required by the reinsurer when considering the facultative reinsurance of a property risk. (10)

6.
 - (a) State **five** factors that affect the percentage of flat-rate profit commission allowed in a proportional reinsurance treaty. (5)
 - (b) Identify key income and expenditure details that form part of the resulting profit commission calculation. (8)

7. Insurer XYZ has a retention of £50 million on a surplus reinsurance of 13 lines, giving a maximum capacity of £700 million. Based on its maximum exposure to any one loss event for its retention, it is prepared to pay all losses on any one risk up to £5 million itself and arranges a risk excess of loss cover of £45 million in excess of £5 million.

Calculate, **showing all your workings**, using the table **below** as a template which you should **copy into your answer booklet**, the apportionment of losses between XYZ and its reinsurers for the following risks:

- (a) Risk A – Sum insured £150 million, gross loss £30 million. (3)
- (b) Risk B – Sum insured £40 million, gross loss £10 million. (3)
- (c) Risk C – Sum insured £55 million, gross loss £50 million. (3)
- (d) Risk D – Sum insured £600 million, gross loss £9 million. (3)
- (e) Risk E – Sum insured £200 million, gross loss £3 million. (3)

	Loss to surplus	Loss within retention (before excess of loss)	Loss to excess of loss
Risk A			
Risk B			
Risk C			
Risk D			
Risk E			

8. Identify **five** components that make up excess of loss reinsurance premiums. (10)

QUESTIONS CONTINUE OVER THE PAGE

9. Three claims have been made under a facultative excess of loss reinsurance with a limit of £2 million and a deductible of £2 million. These claims (from ground up) are:

Claim A: £2 million

Claim B: £3 million

Claim C: £4 million

In each case, £600,000 of costs and expenses has been incurred in defending the claim and the reinsured has been found liable under the original policy in the amount of that claim.

Calculate what is recoverable by the reinsured when the expenses:

- (a) form part of the ultimate net loss (UNL); (3)
- (b) are recoverable pro rata in addition to the limit. (3)
10. Identify and explain **three** types of payment clauses found in reinsurance contract wordings. (12)
11. Under the Insurance Act 2015 the reinsured has a statutory duty to make a fair presentation of the risk to the reinsurer before the contract is entered into.
- (a) State **three** requirements of a fair presentation that the reinsured has to comply with. (3)
- (b) State **two** requirements of disclosure that the reinsured has to comply with. (2)
12. (a) Explain why proportional reinsurance may be suitable for a portfolio of property risks. (6)
- (b) Explain how reinsurers use various forms of commission to influence the pricing of a proportional reinsurance. (7)

- 13.** Outline, within a portfolio of motor insurance business:
- (a)** **three** different types of cover; (6)
 - (b)** the issues associated with unlimited liability covers. (4)
- 14.** Explain the purpose and operation of total loss only (TLO) reinsurance in a marine account. (6)

QUESTIONS CONTINUE OVER THE PAGE

PART II

Answer TWO of the following THREE questions
Each question is worth 30 marks

15. Insurance company XYZ is considering three reinsurance treaty options:
1. A quota share treaty with a capacity of £100,000, 40% of which is retained by the insurer and 60% ceded to reinsurance.
 2. A nine line surplus treaty with £10,000 net retention and automatic underwriting capacity of £100,000.
 3. A combined quota share and surplus treaty as follows:
 - A nine line surplus treaty with £10,000 net retention and automatic underwriting capacity of £100,000.
 - The net retained line of £10,000 will be shared between the insurer and the reinsurer by means of a quota share treaty with a retention of 70% and cession of 30%.

Proportional facultative reinsurance might be sought for any risk in excess of the maximum capacity.

The following risks would be ceded to the treaties:

Risk A – Sum insured £11,000

Risk B – Sum insured £150,000

Calculate, **showing all your workings**, using the accompanying table as a template which you should **copy into your answer booklet** and record your calculations there, for **each** of the **three** options above.

- (a) Apportionment of liability between XYZ and its reinsurers. **(15)**
- (b) Apportionment of claims between XYZ and its reinsurers if both risks suffered a £10,000 loss. **(15)**

Apportionment of liability

	Risk A	Risk B
Quota share		
XYZ		
Treaty reinsurers		
Facultative reinsurers		
Surplus		
XYZ		
Treaty reinsurers		
Facultative reinsurers		
Combined		
XYZ		
Quota share reinsurers		
Surplus reinsurers		
Facultative reinsurers		

Apportionment of claims

	Risk A	Risk B
Quota share		
XYZ		
Treaty reinsurers		
Facultative reinsurers		
Surplus		
XYZ		
Treaty reinsurers		
Facultative reinsurers		
Combined		
XYZ		
Quota share reinsurers		
Surplus reinsurers		
Facultative reinsurers		

QUESTIONS CONTINUE OVER THE PAGE

16. Property insurer ABC has a fire insurance portfolio protected as follows:

- 60% quota share with maximum gross acceptance of £100,000.
- Catastrophe cover for common account of £1 million excess of £300,000 at 5% of gross premium income (GPI).

GPI is £10 million.

The insurance company decides to purchase stop loss protection of 50% of retained premium in excess of 100% of retained premium.

(a) Explain the purpose and operation of stop loss treaties. (10)

(b) State the advantages and disadvantages of stop loss treaties. (10)

(c) Calculate, **showing all your workings**, ABC's retention and reinsurance recoveries from the stop loss treaty reinsurers if:

(i) its retained losses after all prior reinsurance recoveries amount to £5 million; (5)

(ii) its retained losses after all prior reinsurance recoveries amount to £7 million. (5)

17. You are a broker making a presentation to your company's graduate trainees about the global reinsurance marketplace.

Describe the characteristics of a successful international reinsurance centre. (30)

