PGDM (Insurance Business), 2014-16

Reinsurance

INS-402

Trimester –IV, End-Term Examination, August- 2015

Time allowed: 2½ Hours | Max Marks: 50

Roll No: ___________

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work please use answer sheet.

Section-A

There are 5 questions in this section. Attempt any 3 questions. Each question carries 5 marks and the Word limit is 200 words.

A1. The ABC Insurance Company wishes to accept a risk which is excluded from its treaty reinsurance. The risk may incur frequent small claims that ABC is prepared to retain but it wants reinsurance cover to protect against the possibility of any unexpected large claim. Explain, with reasons, the type of reinsurance ABC should purchase since treaty reinsurers refused to provide cover for this risk.

A2. a) A new Insurance company is looking for the reinsurance arrangements to protect its portfolio. What kind of reinsurance market or reinsurers he should look for and why? (3)

b) Identify 2 reasons why a reinsured might not place its entire reinsurance programme with one reinsurer. (2)

A3. You are posted in the reinsurance department of Insurance Company and involved in designing of a reinsurance programme. Identify factor that you will take into consideration in designing a reinsurance programme.

A4. A manufacturing unit valued at £60,000,000, was insured with two insurers who took equal shares of £30,000,000. Both insurers have different reinsurance programme in place.

Insurer X has a nine lines surplus reinsurance treaty with retention of £3,000,000.
Insurer Y has a facultative excess of loss reinsurance of £27,000,000 x £3,000,000.

Consider the following three losses (from ground up).
Loss 1 £4,500,000
Loss 2 £7,000,000
Loss 3 £10,000,000
Calculate the liability of each insurer and the recovery from their reinsurers.

Contd.-2/-

A5. While entering into a treaty arrangement, reinsurer would like to have necessary information about the insurer and its way of operation. Outline five material information required to be submitted for the placement of an excess of loss treaty by the reinsured.

Section-B

[Note: Answer 2 out of the 3 Questions below. Each Question carries 10 marks and word limit is 500.

B1. a. Using the following example, calculate, showing all your workings, the profit commission available at 31 December 2009 showing income and outgoings. (6)

	AS at	**USD $**
Written premium	2008	175,000
Written premium	2009	185,000
Claims paid	2009	60,000
Outstanding Claims	31/12/2009	70,000
Outstanding claims	31/12/2008	50,000

Premium reserve	40%
Management expenses	5%
Deficits carried forward	-
Commissions	35%
Profit Commission (flat)	20%

b. Explain the factors that can affect the level of commission under a proportional treaty. (4)

B.2 A large client of yours is interested to know the reinsurance arrangements made by your insurance company as a part of risk management. Very first he would like you to make him understand in brief the following:

a) the proportional method of reinsurance; (3)

b) the non-proportional method of reinsurance; and (3)

c) advantages and disadvantages of using a proportional method in comparison to non-proportional method. (4)

Contd.-3/-

B3. The Finance Director of the Bright Insurance Company has reviewed the overall reinsurance results of the company's property and casualty reinsurance programmes. The summary figures are: £'000s.

Year	Reinsurance Premium Paid	Reinsured Claims Paid and outstanding	Result	Claims Ratio
2004	25,000	35,000	-10,000	140%
2005	35,000	25,000	10,000	71%
2006	30,000	20,000	10,000	67%
2007	30,000	25,000	5,000	83%
2008	40,000	20,000	20,000	50%
Total	**160,000**	**125,000**	**35,000**	**78%**

The figures do not include IBNR claim estimates.

The Finance Director of the insurer has asked

• Why the reinsurance premium paid has changed from year to year taking into account that the change to the original business is minimal?

• In view of the fact that the programme has been profitable to reinsurers over the 5 year period, why should the company buy reinsurance and not retain the profit made by reinsurers?

In light of these questions, explain

a) the possible reasons for the fluctuation in the reinsurance premiums paid over the period;

b) the reasons for continuing to purchase reinsurance; and

c) the possible action to reduce the reinsurance costs.

Section-C

Case Study **Marks: 15**

Compulsory questions-

a) An insurance company writes property business up to a maximum any one risk of £1,000,000. It has an annual gross premium income of £20,000,000. It currently has in force an 80% quota share treaty with 40% ceding commission.

Expense ratio is 20% and 15% commission ratio on gross premiums.

You are the Reinsurance Manager and are considering switching to a risk excess of loss contract of £800,000 x £200,000 with unlimited free reinstatements.

During the past year the account has suffered £12,500,000 of losses, of which £5,500,000 in total would have been recoverable from the proposed excess of loss cover.

Your broker has approached various markets and achieved a quote of 20% of gross premium for the per Risk excess of loss contract.

If the loss experience remains the same for the forthcoming year:

(i) Calculate, showing all our workings, what the profit/loss for your company would be after the application of reinsurance under both alternative structures; (6)

(ii) Based on the calculations in (a) (i) above, identify which of the reinsurance contracts you would choose. (3)

(iii) If the reinsurance market hardened, what effect would that have on both types of reinsurance contracts. (3)

b) Briefly explain PML and its utility in reinsurance. (3)

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