NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

B.COMM INSURANCE AND RISK MANAGEMENT

REINSURANCE PRINCIPLES AND APPLICATION : CIN 2102

JUNE/JULY EXAMINATION 2004

DURATION 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer any four questions
2. All questions carry equal marks

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1. A company has an option of either arranging a risk excess of loss treaty or a quota share treaty. The information available is as follows:

   Programme X: 60% quota share treaty with 25% ceding commission. Subject to a gross acceptance of $2 000 000.

   Programme Y: Risk excess of loss-$ 1 400 000 excess of $ 600 000 Premium adjustable at 25 % of the OGP (original gross premium)

   Assuming that
   (a) the company's expected OGP is $40 000 000 and that commission and expenses ratios relative to the OGP are 10% and 15% respectively.
   (b) expected losses in the first year are $ 16 000 000, but total recovery from the proposed excess of loss treaty will be $ 2 400 000.

   (i) Which treaty would be profitable? **(10 marks)**

   (ii) Which factors should be taken into account when comparing the benefits, or otherwise, of purchasing a quota share treaty as against a risk excess of loss treaty.
   (9 marks)

   (iii) Define the following:(a) Gross retention
   (b) Cash loss limit
   (c) Facultative obligatory treaty
   (6 marks)

2. (i) Explain the following terms:

(a) Earned premium
(b) Incurred losses
(c) Incurred loss ratio **(6 marks)**

(ii) Table of retentions

Risk category	Area 1	Area 2	Area 3
A Museums	1250000	1000000	875000
B Hotels	1000000	800000	625000
C Cinemas	750000	600000	500000
D Cafes	500000	350000	250000
E Discotheques	250000	150000	125000

Assuming the company has obtained the following surplus treaty:

A risks	up to 5 lines
B risks	up to 5 lines
C risks	up to 4 lines
D risks	up to 3 lines
E risks	up to 2 lines

Based upon a maximum Class A1 retention of 1250 000 sum insured.

The company has classified a cinema as C1. The cinema's sum insured is 5750000. The company will utilise its maximum available retention and cede accordingly a maximum amout to its surplus. The Original Gross Premium rate is 0,25% 0f the sum insured.

(a) Please give full details of the surplus capacity (i.e A1, A2,A3 ….E3)
(b) What is the monetary amount the company has decided to retain on the cinema risk.
(c) Please allocate the risk and premium generated to the retention and surplus and any other facilities.
(d) Two losses occur on the cinema risk, one for 800000 and the second for 3200000. Please allocate the losses to the company's retention, surplus treaty and other facilities.
(e) Suppose the cinema risk's sum insured has been based assessed at 30% EML and surplus capacity still remains at 4 lines. Show how this will affect the apportionment of the risk and the premium and the two losses. **(19marks)**

Explain the following:

(a) Loss participation clause **(5 marks)**
(b) Premium reserve deposit clause **(5 marks)**
(c) Losses occurring basis **(5 marks)**
(d) Ex-gratia payment **(5 marks)**
(e) Latent claims **(5 marks)**
[Total 25 marks]

4. Discuss the functions of reinsurance. **(25 marks)**

5. (a) What is profit commission? Show how it is calculated**. (10 marks)**
(b) Describe four premium reserving methods used by insurers.
(12 marks)
(c) What is meant by a "balanced portfolio" **(3 marks)**
[Total 25 marks]

6. (i) Discuss the following, citing cases where applicable:

(a) Follow the fortunes clause
(b) Privity of contract
(c) Cut through clause
(d) Two risk warranty
(e) Facultative reinsurance **(15 marks)**

(ii) Discuss the uses of a Quota share treaty **(10 marks)**
[Total 25 marks]

END OF EXAMINATION PAPER!!