

EXAM 6 – CANADA, FALL 2016

21. (2.75 points)

a. (1.5 points)

Identify and briefly describe the three categories of risks considered in A.M. Best BCAR.

b. (1.25 points)

Describe the calculations that are performed in the BCAR model for the natural catastrophe stress test.

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EXAM 6C FALL 2016 SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 21	
TOTAL POINT VALUE: 2.75	LEARNING OBJECTIVE(S): C2
SAMPLE ANSWERS	
Part a: 1.5 points	
<ul style="list-style-type: none"> • UW Risk: To consider <ol style="list-style-type: none"> 1) written premium (quality of business and premium written), 2) the loss reserve (are the loss reserves adequate?), 3) adequate reinsurance program (is reinsurance sufficient?) • Credit Risk: To consider the 3rd party default risk (will increase capital required for unregistered reinsurers or reduce capital required for use of collateral) • Investment Risk: To consider risk of fixed income securities, interest rate risk, market risk 	
Part b: 1.25 points	
<ol style="list-style-type: none"> 1) Reduce surplus by after tax net PML 2) Increase unpaid claims by 40% of net before tax PML 3) Increase reinsurance recoverable by 40% of ceded before tax PML 4) Reduce adjusted surplus (1) from after tax net PML of second event 5) If the first event was a EQ, the surplus is reduced by 1-in-100 year occurrence PML in (4) If the first even was a storm surge or hurricane, the same amount is reduced in steps (1) and (4) 	
EXAMINER'S REPORT	
Candidates were expected to describe the major risks categories considered in AM Best BCAR and the catastrophe stress test in the BCAR model.	
Part a	
Candidates were expected to identify the three risk categories and provide sufficient descriptions on each.	
<p>The three risks listed in the paper are investment risk, credit risk and underwriting risk. However, we accepted a wide range of words of similar meanings – i.e. market risk, asset risk, financial risk as investment risk; insurance risk as underwriting risk.</p> <p>Common mistakes included:</p> <ul style="list-style-type: none"> • Failed to describe credit risk as counterparty default risk • Descriptions for investment risk limited to only interest rate risk or inflation • Mentioning unearned premium or premium liabilities as the second component of underwriting risk (the first one being loss reserves). This is incorrect as underwriting risk considers both loss reserve risk and pricing risk, the latter referring to written premium instead. • Overly brief descriptions 	

EXAM 6C FALL 2016 SAMPLE ANSWERS AND EXAMINER'S REPORT

Part b

Candidates were expected to demonstrate understanding of the general steps involved in performing the BCAR catastrophe stress test.

Common mistakes included:

- Stating increase reserves or reinsurance recoverables by 40%
- Stating the first or second event is performed without mentioning that the PML is deducted from surplus
- Overly brief descriptions