

17. (2 points)

Identify the four functional areas of the governance structure required by Solvency II – Pillar 2, and briefly describe one responsibility of each function.

## SAMPLE ANSWERS AND EXAMINER'S REPORT

<b>QUESTION: SPRING 2018 EXAM 6U, QUESTION 17</b>	
<b>TOTAL POINT VALUE: 2</b>	<b>LEARNING OBJECTIVE: C3</b>
<b>SAMPLE ANSWERS</b>	
<p>The four functional areas of the governance structure:</p> <ul style="list-style-type: none"><li>• Internal Audit or Audit or Internal Control</li><li>• Actuarial</li><li>• Risk Management or Risk or ERM</li><li>• Compliance or Legal</li></ul>	
<p>Sample Responses for “Internal Audit or Audit or Internal Control”</p> <ul style="list-style-type: none"><li>• Report the shortcomings in compliance with policies and procedures</li><li>• Report any deficiencies of internal controls</li></ul>	
<p>Sample Responses for “Actuarial”</p> <ul style="list-style-type: none"><li>• Ensure the reasonability of methods and assumptions when calculating the technical provision</li><li>• Provide opinion on the overall underwriting policy and adequacy of reinsurance</li><li>• Perform retrospective analysis of best estimates against actual experience</li><li>• Estimate the technical reserves required by the company based on its exposure</li><li>• Complete the Statement of Actuarial Opinion (SAO)</li></ul>	
<p>Sample Responses for “Risk Management or Risk or ERM”</p> <ul style="list-style-type: none"><li>• Risk Management should monitor the risk management function of the company</li><li>• The Risk Management department should maintain an aggregate risk framework of the risks taken on by the insurer</li><li>• Ensure the integration of any internal model with the risk management function</li><li>• Creating and implementing the ORSA framework which helps assess the company’s solvency requirements</li></ul>	
<p>Sample Responses for “Compliance or Legal”</p> <ul style="list-style-type: none"><li>• Compliance should ensure the internal control system is effective to comply with applicable laws and regulations</li><li>• The Compliance department should report any regulation compliance issues to the board of directors</li><li>• Compliance should ensure that the company complies with any requirements of Solvency II regulations</li><li>• Ensure the compliance with regulations that prescribe ORSA completion</li></ul>	
<b>EXAMINER'S REPORT</b>	
<p>Candidates were expected to identify the four functional areas of the governance structure required by Pillar II of Solvency II and then briefly describe a responsibility of each function that related back to solvency, measuring or monitoring risk, or ensuring methodology or operational</p>	

## SAMPLE ANSWERS AND EXAMINER'S REPORT

risk is not introduced.

Common errors included:

- Providing a broad responsibility that did not relate back to risk and/or solvency such as setting rates or determining reserves for Actuarial
- Discussing Pillar I or Pillar III requirements
- Listing other areas within an insurance company such as claims, underwriting, accounting, etc.
- Providing ORSA as one of the four functional areas
- Switching the responsibilities of Internal Audit with Compliance or vice versa
- Stating that the Internal Audit function checked the data and/or the methodology
- Stating External Audit instead of Internal Audit
- Describing a risk management task rather than monitoring the risk management function
  - Example: "Measuring the company's risk" is a task. The Risk Management functional area is responsible for monitoring the risk management process and ensuring that an aggregate view of risk is maintained.

<b>QUESTION: SPRING 2018 EXAM 6U, QUESTION 18</b>	
<b>TOTAL POINT VALUE: 3.75</b>	<b>LEARNING OBJECTIVE: C2</b>
<b>SAMPLE ANSWERS</b>	
<b>Part a: 3.25 points</b>	
<i>Sample 1</i>	
$2016 \text{ RBC} = R_0 + \sqrt{R_1^2 + R_2^2 + R_3^2 + R_4^2 + R_5^2}$ $= R_0 + \sqrt{2^2 + 5^2 + 1.5^2 + 10^2 + 6^2} = R_0 + 12.933M$	
Company LR = Average [(0.9/0.85)*(0.95), (0.95)] = 0.9779	
2017 NWP RBC base charge = 35M*(0.9779*0.96 + 0.25 - 1) = 6.607M	
NWP growth rates:	
2013-2014: (20/18 - 1) = 11.11%	
2014-2015: (21/20 - 1) = 5%	
2015-2016: (30/21 - 1) = 42.86% → capped at maximum of 40%	
2016-2017: (35/30 - 1) = 16.67%	
3-year average: (16.67% + 40% + 5%)/3 = 20.56%	
Cap 3-year average : max( min(40% , 20.56%) , 10%) = 20.56% → no impact in this case	
excess growth: 20.56% - 10% = 10.56%	
RBC charge for excessive growth: (10.56%*0.225*35M) = 0.832M	
Total 2017 R5 = 6.607M + 0.832M = 7.439M	
2017 RBC = R0 + $\sqrt{2^2 + 5^2 + 1.5^2 + 10^2 + 7.439^2} = 13.66M$	