

# EXAMINATION

18 October 2019

## Subject F206 – Banking Specialist Applications

Time allowed: Three hours

### *INSTRUCTIONS TO THE CANDIDATE*

- 1. Follow log in and saving instructions issued to you at the exam venue.*
- 2. Save your work throughout the exam.*
- 3. You are required to submit your answers in Word format only using the template provided. You MAY NOT use any other computer program (e.g. Excel) during the examination.*
- 4. You have 15 minutes at the start of the exam in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*
- 5. You must not start typing your answers until instructed to do so by the invigilator/supervisor.*
- 6. Mark allocations are shown in brackets.*
- 7. Attempt all questions, beginning your answer to each question on a new page.*
- 8. You should show calculations where this is appropriate. If necessary, an answer book may be used for this purpose.*

**Note: The Actuarial Society of South Africa will not be held responsible for loss of data where candidates have not followed instructions as set out above.**

### *AT THE END OF THE EXAMINATION*

**Check that you have saved your work as per instructions given to you.  
Hand in your question paper with any additional sheets firmly attached.**

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.
--

## QUESTION 1

You are the Retail Product Head for a bank in South Africa, ABC Bank. Your bank has a full-service banking offering and the bank holds roughly 25% market share across all products and all market segments. At this stage the bank does not offer any insurance products aside from simple credit life cover. Your bank has an effective rewards program.

Mega Insurance holds a large share of the insurance market across medical, life and general insurance and has applied for a banking licence. Mega Insurance initially intends to create a transactional account offering. The account will have no monthly account fees but rather only pay-as-you-use fees. Mega Insurance will target retail customers and market the account as “free banking”. The bank offering will only utilize digital platforms, which are their online banking platform and their existing mobile application and will integrate with their current rewards program.

i. Describe how you would develop a strategy to counter the competitive and other business risks that could arise because of this.

[22]

ii. You have been tasked to estimate the value of ABC Bank business potentially at risk to Mega Bank. Discuss how you would estimate the value of the business at risk.

[9]

iii. Suggest strategic and product options that could be implemented based on the strategic and risk analyses you conducted in response to the new competitor bank.

[7]

[Total 38]

**REMEMBER TO SAVE**

**PLEASE TURN OVER**

## QUESTION 2

Your bank wrote large volumes of long-term retail assets at a time when liquidity spreads were very low. Many of these assets are still on the bank's balance sheet. Discuss what this might mean for the bank's ALM risk position and what the potential responses are.

[Total 12]

## QUESTION 3

i. Discuss the concept of expected and unexpected credit losses in the context of a Bank's capital requirements.

[5]

ii. Bank capital management should be articulated formally in a policy standard. Describe what would be included in a Bank's capital management policy.

[8]

[Total 13]

**REMEMBER TO SAVE**

**PLEASE TURN OVER**

#### QUESTION 4

You are the Retail Credit Head for a large bank within Southern Africa. Currently your Retail Unsecured portfolio consists of Credit Cards, Overdrafts, Unsecured Loans and Pay Day Loans. These portfolios are run independently of one another and clients at the application stage are risk scored separately for each product offering requested. All product offerings are made independently of one another. To simplify the sales process, and to allow the customer choice, the Sales Head requests a single ratings model be built to assess a customer at application stage for all products simultaneously.

- i. Outline criteria by which a credit ratings model, such as a scorecard, should be evaluated. [2]
- ii. Describe how you would build a customer level application scorecard and implement the combined offering for the business. [12]
- iii. Discuss some benefits and challenges you may encounter because of using customer level scorecards. [5]
- iv. The bank completes the new customer level scorecard and offering platform, and this goes live on 1 January 2017. The table that follows shows the financials and other information for the Credit Card, Unsecured Loans and Pay Day Loans portfolios for the 2015/2016/2017 calendar years (in R'm). It is worth noting that no deliberate changes were made with respect to the risk appetite, pricing, capital or provisioning policies of the bank over the 2017 calendar year (with the implementation of the new scorecard). The expectation from business is that all products will perform similarly if not slightly better with this implementation. You can assume nothing significant changed on the Overdraft portfolio.

**REMEMBER TO SAVE**  
**PLEASE TURN OVER**

<b>Total Unsecured Portfolio</b>			
<b>Annual Financials</b>	<b>Calendar Year</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Book Size: Limits Booked (R'm)</b>	R 55 000	R 57 750	R 63 525
<b>Book Size: Total Outstanding Balances (R'm)</b>	R 52 604	R 55 812	R 56 354
<b>New Business: New Limits Approved (R'm)</b>	R 4 200	R 4 326	R 6 835
<b>New Business: Total Balances Utilised and Disbursed (R'm)</b>	R 24 550	R 26 057	R 27 023
<b>Bad Debt Charge For The Year (R'm)</b>	R 5 260	R 5 609	R 5 588
<b>Interest &amp; Fee Revenue For The Year (R'm)</b>	R 8 675	R 9 161	R 9 296

<b>Credit Card Portfolio</b>			
<b>Annual Financials</b>	<b>Calendar Year</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Book Size: Limits Booked (R'm)</b>	R 55 000	R 57 750	R 63 525
<b>Book Size: Total Outstanding Balances (R'm)</b>	R 19 250	R 20 790	R 24 775
<b>New Business: New Limits Approved (R'm)</b>	R 4 200	R 4 326	R 6 835
<b>New Business: Number Of Limits Approved</b>	165 000	169 125	186 038
<b>New Business: New Limit Drawn Exposure After 1 Year (R'm)</b>	R 1 050	R 1 082	R 3 759
<b>Bad Debt Charge For The Year (R'm)</b>	R 850	R 910	R 870
<b>Interest &amp; Fee Revenue For The Year (R'm)</b>	R 2 100	R 2 268	R 2 767

<b>Unsecured Loans Portfolio</b>			
<b>Annual Financials</b>	<b>Calendar Year</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Book Size: Total Outstanding Balances (R'm)</b>	R 33 000	R 34 650	R 31 185
<b>New Business: Total Value Of Loans Disbursed (R'm)</b>	R 15 000	R 16 050	R 13 803
<b>New Business: Number Of Loans Disbursed</b>	400 000	420 000	470 400
<b>Bad Debt Charge For The Year (R'm)</b>	R 3 500	R 3 745	R 3 708
<b>Interest &amp; Fee Revenue For The Year (R'm)</b>	R 5 300	R 5 554	R 5 110

<b>Pay Day Loan Portfolio</b>			
<b>Annual Financials</b>	<b>Calendar Year</b>		
	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Book Size: Total Outstanding Balances (R'm)</b>	R 354	R 372	R 394
<b>New Business: Total Value Of Loans Disbursed (R'm)</b>	R 8 500	R 8 925	R 9 461
<b>New Business: Number Of Loans Disbursed</b>	1 000 000	1 051 000	1 115 111
<b>Bad Debt Charge For The Year (R'm)</b>	R 910	R 955	R 1 010
<b>Interest &amp; Fee Revenue For The Year (R'm)</b>	R 1 275	R 1 339	R 1 419

Based on the information provided per portfolio, evaluate how is the new scoring and offer system performing and detail any potential courses of action based on this evaluation.

[18]

[Total 37]

[Grand Total 100]

**REMEMBER TO SAVE**

**END OF PAPER**