EXAMINATION

5 November 2025 (am)

Subject F107|B100 — Banking Fellowship Applications

Examination time: *Three hours and fifteen minutes (includes reading time)*

Upload time: *Five minutes*

[Total time on examination countdown clock: Three hours and twenty minutes]

Total marks: *100*

INSTRUCTIONS TO THE CANDIDATE

Failure to adhere to any of these instructions could incur examination sanctions including disqualification from the examination.

1. *The question paper is only available on the ASSA Exam Platform as a PDF download and may not be printed. Copy/paste of questions or parts thereof is allowed from the question paper to your Word answer document only.*

2. *Download the Word answer document template from the ASSA Exam Platform. Save this Word answer document on your desktop using your* ***full Candidate Number****, which starts with "F107/B100-exa-2025-…", as filename.* ***Do not name your answer script with your name or member number.***

3. *Ensure that your* ***full Candidate Number*** *appears in the "header" of your Word answer document. [Double-click on the header at the top of the Word document, input your Candidate Number only in the header, then press "Esc" to close the header.]* ***Do not use your name or member number anywhere in your Word answer document.***

4. *You are required to submit your answers in Word format ONLY using this document. No answers in any other format (e.g. handwritten) will be accepted. Save work regularly.*

5. *You may not access any file from your computer, use any other computer software (e.g., Email or Excel), or open or use any other browser, collaboration tools or AI tools, including those embedded in MS Word and Adobe AI assistant (e.g. Copilot, ChatGPT etc.) during the examination. Embedded AI tools must be disabled. You may not use Grammarly, Grammarly Premium or similar built-in language and grammar tools which must also be disabled. Microsoft Word spellcheck is allowed.*

6. *You must save your answer template to your local machine's desktop and have 'Autosave' switched off (top-left button in Word). You must not save your answer template to OneDrive or any other cloud storage device.*

7. *You are not permitted to bring any other material into the examination (e.g. a Formulae and Tables book). Any such information/material that may be required will be provided to you in the examination.*

8. *You are strongly encouraged to use the first 15 minutes as reading time only, however, you may start answering the paper whenever you are ready.*

9. *Mark allocations are shown in brackets.*

10. *Attempt all questions, starting each on a new page (as provided for in the Word answer document).*

11. *Show calculations where appropriate. You may not use other materials except blank paper for calculations. You may use a calculator from the ASSA-approved list only.*

12. *Your examination countdown timer reflects your TOTAL examination time. Reading and writing time is 3 hours and 15 minutes. Audio prompts will remind you of the remaining writing time and when you should stop writing to start saving and uploading.* ***You may NOT continue to write during the 5 minutes upload time as this could lead to disqualification from the examination.***

13. *Upload one version of your Word answer document only onto the ASSA Exam Platform. Once you have uploaded your document, you must click on* ***Finish Attempt*** *to save your document. You will still be allowed to go back and check that you have uploaded the correct version of your answer script (****Review Attempt****) if you have time. Remember that you may not type answers in the last 5 minutes of upload time.*

14. *Once you are satisfied with your uploaded document, click* ***Finish Attempt*** *and* ***Finish all and Submit****. Once you have submitted, you will not be able to make any changes.*

15. ***You must submit your Word answer document BEFORE the time on your examination countdown timer runs out.***

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. The onus remains on you to read and implement all examination instructions.

END OF INSTRUCTIONS

QUESTION 1

i. Define Value at Risk (VaR) and describe its key assumptions and limitations.

[4]

A bank's trading portfolio experiences significant volatility due to uncertain market conditions

ii. Explain how the bank can enhance its market risk management by using a range of risk measurement techniques and risk mitigation strategies alongside Value at Risk.

[6]

[Total 10]

QUESTION 2

i. Define ICAAP and briefly outline how it contributes to the management of risks in banks.

[2]

ii. Describe how the ICAAP helps banks plan for future capital needs. Focus on how stress testing and scenario analysis can support capital management in uncertain conditions.

[7]

A bank's ICAAP process identifies that a large portion of its corporate lending is concentrated in a single industry.

iii. Explain how this could affect capital requirements and outline actions the bank might take to reduce risk.

[7]

[Total 16]

QUESTION 3

i. Explain the relevance of Environmental, Social, and Governance (ESG) risks in banking, focusing on financial stability and reputational risks

[6]

ii. Outline how banks can integrate climate factors into their credit risk models, incorporating climate-related financial risks.

[6]

iii. Briefly outline the different stakeholders involved in a model build process through the model lifecycle.

[4]

[Total 16]

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QUESTION 4

i. Explain the key revisions made under "Basel IV" as part of the finalisation of Basel III, including how these changes aim to improve the credibility and comparability of capital requirements.

[5]

A bank has total exposures of L$500 million, consisting of the following asset classes:

- Corporate loans: L$300 million (previous risk weight: 50%, revised risk weight: 60%)
- Retail mortgages: L$150 million (previous risk weight: 40%, revised risk weight: 50%)
- Sovereign bonds: L$50 million

Under Basel IV, the standardised approach introduces higher risk weights for certain asset classes.

ii. Calculate the increase in risk-weighted assets (RWA) under the revised framework and determine the additional capital required if the minimum capital ratio remains at 8%.

[3]

iii. Discuss the broader implications of these changes on bank capital adequacy and lending practices.

[5]

In the country of Actuaria instead of a constant (flat) risk weight for retail mortgages, the regulator has confirmed the following risk weight approach based on LTV (Loan to Value):

LTV	LTV < 25%	25% ≤ LTV < 40%	40% ≤ LTV < 70%	LTV ≥ 70%
Risk Weight	10%	50%	60%	80%

iv. Outline the possible reasons for the approach and compare this method to a single risk weight approach.

[3]

The current retail mortgage book distribution is shown below.

LTV	LTV < 25%	25% ≤ LTV < 40%	40% ≤ LTV < 70%	LTV ≥ 70%
Retail Mortgage book – distribution (L$150m)	50m	30m	20m	50m

The acquisitions team are looking to purchase a retail mortgage loan portfolio with LTV ≥ 70%.

v. Calculate the size of the portfolio that could be purchased to ensure that the overall risk weight of the portfolio is the same as the revised standardised risk weight.

[2]

[Total 18]

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QUESTION 5

Personal loan products usually have a term up to 5 years. A colleague has suggested personal loans should be extended up to 10 years as this could improve customer retention and revenue to the bank.

i. Discuss the merits of this proposal and highlight any risks to the bank.

[6]

Doge Bank currently operates a reward programme where customers earn points for using banking services such as utilising their credit cards, maintaining a minimum balance in their savings accounts, and using the banking application (mobile app).

The reward programme offers various tiers (reward levels), based on customers' banking activities and products.

Tier	Activity required
1	▪ Have an active credit card account.
2	▪ Have an active credit card account. ▪ Perform 5 transactions on the banking app.
3	▪ Have an active credit card account. ▪ Perform 5 transactions on the banking app. ▪ Have an active personal loan product.
4	▪ Have an active credit card account and spend at least L$1 000 per month. ▪ Perform 10 transactions on the banking app. ▪ Have an active personal loan. ▪ Have an active savings product.
5	▪ Have an active credit card account and spend at least L$1 000 per month. ▪ Perform 10 transactions on the banking app. ▪ Have an active personal loan. ▪ Have an active savings product and grow it by L$500 per month.

ii. Comment on the potential effectiveness of the reward programme structure. Focus on elements of customer retention and profitability.

[4]

Doge Bank is looking to enhance its reward programme over the next year. The team have suggested the inclusion of a financial literacy module completion as a reward activity.

iii. Analyse the potential benefits and risks of adding financial literacy module completion as a reward activity to Doge Bank's existing programme.

[6]

iv. Describe the key factors Doge Bank should consider when designing the financial literacy modules and determining the reward criteria or rewards.

[4]

[Total 20]

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QUESTION 6

i. Explain the importance of considering price elasticity and the marginal cost of extra deposits for a bank looking to increase its retail deposit base to fund additional lending.

[4]

Gestalt Bank is a large, full-service retail bank. The following table contains a summary of the savings products that the bank currently offers and their key features:

Product	**Minimum Deposit (L$)**	**Term**	**Access**	**Rates (nominal per annum)**
EntrySave	0	N/A	Immediate	6.00% - 7.25%
EntryInvest	100	N/A	24 hours	6.25% - 7.50%
32Day Notice	100	N/A	32 days	6.75% - 8.00%
Access Deposit	2 500	12 months	Two 24-hour notice withdrawals allowed during term	6.00% - 7.25%
Fixed Deposit	10 000	1 – 60 months	End of term	7.50% - 9.00%

ii. Discuss the product offering summarised above, considering:

a. The range of available products and their benefits both to the bank and to customers.

b. The rates offered on the different products.

[10]

Gestalt Bank is considering launching a new savings product with the aim of attracting additional deposits to fund further lending. This product would offer preferential rates on fixed deposits to customers over the age of 55.

iii. Outline factors that Gestalt Bank should consider in developing and launching this new product.

[6]

[Total 20]

[Grand Total 100]

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END OF PAPER

