



Department of Finance and Investments

BANKING 3

BNK 33B3

Final Assessment 2017

Time: 180 Minutes

Marks: 100

Assessor: Mr John Mabejane

External Moderator: Mr Andrew Pampallis

INSTRUCTIONS:

This paper consists of 3 pages (including the cover page).

- Answer all questions.
- Start each question on a new page.

Question	Topic	Marks	Time
1	Introduction to Risk Management	24	25 Minutes
2	Liquidity and currency risk	22	25 Minutes
3	Binomial and Poisson distribution	09	20 minutes
4	Interest rate risk management	20	50 minutes
5	Operational risk	25	60 Minutes
		100	180

Section 1

24 Marks

Define the following risk related concepts

- 1.1 Risk control- Practical measures to minimise risk
- 1.2 Risk financing- Indemnifies the insured against losses caused by perils
- 1.3 Bottomry – An old type of insurance risk
- 1.4 Risk Aversion – lack of tolerance to risk
- 1.5 Macro Risks- major perils within organisation
- 1.6 Micro Risk- Sub-perils and hazards within the macro-class.
- 1.7 Speculative risk – Types of risk from which profits can be made
- 1.8 Pure Risk – these are risks that only result with a loss and not profits
- 1.9 Fundamental risk- Impersonal of origin & consequence, Originates from the economy, politics, society.
- 1.10 Particular risk - Personal in cause, e.g Fire, explosion
- 1.11 Peril - **Peril is the source of a loss**, Fire, explosion, storm, earthquake
Peril **gives rise to risk**.
- 1.12 Hazard - **the environment surrounding the cause of loss**

Section 2

22 Marks

2.1 Outline and discuss the three types of liquidity risk 6 Marks

- Funding Risk: Due to withdrawal/non-renewal of deposits
- Time Risk: Non-receipt of inflows on account of assets (loan installments)
- Call Risk: contingent liabilities & new demand for loans

2.2 Outline and discuss the three types of currency risk 6 Marks

- Transaction risk –this risk emerges when an entity has contractual cash flow obligations in the form of payables or receivables, whose values are subject to changes in foreign exchange.
- Translation risk- when company financial reporting is affected by changes in exchange rate
- Economic risk – the effect of exchange rate on the company's future cash flows and market value

2.3 Discuss the factors that cause liquidity risk 10 marks

- **Factors affecting liquidity risk (Discussion around this issues)**
 - Over extension of credit

- High level of NPAs
- Poor asset quality
- Mismanagement
- Non recognition of embedded option risk
- Reliance on a few wholesale depositors
- Large undrawn loan commitments
- Lack of appropriate liquidity policy & contingent plan

Section 3

9 Marks

Assume you are a bank logistic manager, you have 30 cash delivering trucks forming part of your fleet, assume further that there is 45 percent probability that a truck will hijacked on its way to delivering money to an ATMs in Sandton , 60 percent chance in Soweto and 70 percent chance in Alexandra.

Using both Binomial and poison distribution, use the information above to calculate the probability that 15 trucks may be hijacked in:

Sandton - Binomial = 0.124248 , Poisson = 0.094513

Soweto- Binomial = 0.078312, Poisson = 0.078566

Alexandra – Binomial = 0.010567, Poisson= 0.039495

Section 4

20 Marks

- 4.1 Write an essay about management of interest rate risk management in a banking environment (20)
- Expected
- Definition of interest rate risk in discussion, what causes interest rate risk, how interest rate risk is managed. (gap analysis)

Section 5

25 Marks

- 5.1 Write an essay about operational risk management (25)

Among others, make sure to ALSO cover the following in you essay:

- ORM process cycle
- Time Critical Risk Management (TCRM)

- Six sins of operational risk management

Discuss this concepts

- Define Operational Risk Management (ORM)
- Define Time-Critical Risk Management (TCRM)
- Describe the levels of ORM
- Discuss the link between the ORM 5 Step Process and TCRM
- Discuss how TCRM increases situational awareness and decreases risks
- Apply TCRM to real-life situations