FINAL EXAMINATION

June 2025

P–20B(RMBI)
Syllabus 2022

RISK MANAGEMENT IN BANKING AND INSURANCE

Time Allowed: 3 hours | Full Marks: 100

The figures in the margin on the right side indicate full marks.
Where considered necessary, suitable assumptions may be made and clearly indicated in the respective answer.
All working notes must form part of the answer

Answer *Question No.1* and *any five* from *Question No. 2, 3, 4, 5, 6, 7* and *8.*

Section-A

Answer *Question No. 1* which is compulsory.

1. (a) **Choose the correct answer from the given four alternatives:** 2×10=20

(i) Operational Risk is the risk of __________.

(A) failure by the borrowers or counterparties to meet contractual obligations

(B) unpredictability of equity markets, commodity prices, interest rates, and credit spreads

(C) loss due to errors, interruptions, or damages caused by people, systems, or processes

(D) inability of a bank to access cash to meet funding obligations

(ii) The major component (s) of Market Risk is / are _________.

(A) Interest Rate Risk

(B) Equity Risk

(C) Commodity Risk

(D) All of the above

(iii) A branch of a bank has given a loan out of deposits at a floating rate. The rate of interest on deposit has been linked by the bank with 91 days treasury bill rate and for the loan, it is linked to 364 days treasury bill rate. The risk from such a situation is called _________.

(A) Interest Risk

(B) Yield Curve Risk

(C) Gap or Mismatch Risk

(D) Basis Risk

(iv) To calculate capital adequacy ratio, the banks take into account, which of the following risks?

(A) Credit risk and operational risk only

(B) Credit risk and market risk only

(C) Market risk and operational risk only

(D) Credit risk, market risk and operational risk

(v) A's car is damaged in a collision with B's car, such collision is __________.

(A) hazard

(B) peril

(C) uncertainty

(D) risk

(vi) Which of the following methods of risk management is also known as Self-Insurance?

(A) Risk Avoidance

(B) Risk Retention

(C) Risk Reduction and Risk Control

(D) Risk Transfer

(vii) Which principle emphasizes that the insured must fully disclose all relevant facts concerning the subject matter of the insurance?

(A) Principle of Indemnity

(B) Principle of Utmost Good Faith

(C) Principle of Contribution

(D) Principle of Subrogation

(viii) The principle of __________ ensures that an insured does not profit by insuring with multiple insurers.

(A) subrogation

(B) contribution

(C) co-Insurance

(D) indemnity

(ix) __________ is the process used by an insurance company to recover the claim amounts paid to a policyholder from a negligent third party.

(A) Underwriting

(B) Nomination

(C) Subrogation

(D) Contract

(x) Which of the following is not a concern of the insurance regulatory framework?

(A) It has to safeguard the interests of the customers.

(B) It has to safeguard the interests of the stakeholders.

(C) It has to ensure the financial soundness of the insurance industry.

(D) It has to help in the healthy growth of the insurance market.

(b) **Based on the following case study, you are required to answer the question nos. (xi) to (xv):** 2×5=10

ABC Bank, a mid-sized Indian bank, has ₹ 200 crores in assets and an equivalent amount in liabilities. The bank's liabilities carry an interest rate of 8% with a one-year maturity, while its assets earn a 10% interest rate with a two-year maturity period.

However, the bank faces a potential risk, as the interest rate environment is uncertain. If interest rates increase when the liabilities mature, the cost of refinancing could exceed the returns on its fixed-rate assets, leading to possible financial strain.

To address this, the Reserve Bank of India (RBI) mandates banks to adopt effective Asset-Liability Management (ALM) strategies to mitigate interest rate risk and ensure financial stability.

In this situation, choose the correct option from the four alternatives given:

(xi) What is the primary reason for ABC Bank's interest rate risk exposure?

(A) Higher asset rate compared to the liability rate

(B) Mismatch in the maturity periods of assets and liabilities

(C) Higher liabilities than assets

(D) RBI's regulatory requirements

(xii) If the liability interest rate increases to 11% in the second year, the bank will

(A) continue to make a profit of ₹ 4 crores.

(B) make a reduced profit of ₹ 2 crores.

(C) incur a loss of ₹ 2 crores.

(D) break-even.

(xiii) Which of the following tools can be used by ABC Bank to manage interest rate risk?

(A) Credit Rating Analysis

(B) Loan Recovery Techniques

(C) Interest Rate Swaps

(D) Customer Relationship Management (CRM)

(xiv) In the context of this case, reinvestment risk arises when

(A) liabilities mature earlier than assets.

(B) assets mature earlier than liabilities.

(C) asset and liability maturities are perfectly matched.

(D) bank maintains excess cash reserves.

(xv) According to RBI guidelines, which of the following methods is commonly used for managing Asset-Liability mismatches?

(A) Duration Gap Analysis

(B) Basel III Liquidity Norms

(C) Capital Adequacy Ratio Calculation

(D) Stress Testing of NPAs

Section-B

Answer *any five* Questions from Question No 2 to Question No 8.

Each question carries 14 marks. 14×5=70

2. (a) Describe with examples the common types of risks faced by banks. 7

(b) "There are several factors that contribute to the market risk". Explain this statement. 7

3. (a) XYZ Bank has a diversified loan portfolio catering to retail, SMEs, and large corporate clients. Recently, the bank faced a surge in loan defaults due to a significant economic downturn. The management realizes that its existing credit monitoring systems at both the transaction and portfolio levels are not sufficient to mitigate rising credit risks. As a result, the bank plans to implement a more comprehensive Credit Risk Management (CRM) system.

Based on this scenario, identify and describe the dual approach XYZ Bank should adopt to effectively control and monitor credit risk, while considering the limitations and potential risks of risk mitigation techniques. 7

(b) Explain the concept of sovereign risk. Also, briefly examine and analyse why it is easier to reschedule debt in the form of bank loans than bonds, particularly in the context of post-war lending in international financial markets. 7

4. (a) "Banks should evolve an adequate framework for managing their exposure in off-balance sheet products like derivatives, bank guarantees, and letters of credit." Explain this statement. 7

(b) Evaluate the following TWO situations and recommend the strategies to be adopted by the bank to mitigate the Credit Risk. 7

Situation-1: A corporate client has requested the bank to sanction a Term Loan of ₹ 200 crores for setting up a project. The loan will be repaid within 5 years. Due to industry exposure ceiling, the bank is unable to undertake the exposure. Given the long-standing relationship with the customer, the bank wants to accommodate the customer. If this loan is sanctioned, the bank will aim at hedging the loan concentration.

Situation-2: A corporation needs a loan of ₹ 1,000 crores to be withdrawn immediately and availed for one year. Among other banks, Unity Bank is also approached for this. The bank is ready to sanction a loan upto ₹ 250 crores (due to exposure ceiling), while the company has requested a loan of ₹ 500 crores, as the balance part has been managed by the company, from other banks. Unity Bank wants to retain the customer by accommodating the party to the extent of ₹ 500 crores.

5. (a) International Bank has paid-up capital of ₹ 200 crores, free reserves of ₹ 600 crores, provisions and contingencies reserves of ₹400 crores, Revaluation Reserve of ₹ 600 crores, Perpetual non-Cumulative Preference Shares of ₹ 800 crores and Subordinated Debt of ₹ 600 crores. The Risk Weighted Assets for Credit and Operational Risk are ₹20,000 crores and for Market Risk, ₹ 8,000 crores.

Based on the above information, assess the following:

(i) The amount of Tier-1 capital

(ii) The amount of Tier-2 capital

(iii) The amount of the fund

(iv) The Capital Adequacy Ratio of the bank 7

(b) Explain with example the principle of Insurable Interest. Also, explain how this principle ensures the legality of an insurance contract. 7

6. (a) Explain the key functions and important duties of an insurance agent in the insurance sector in India. 7

(b) Demonstrate a comprehensive overview of Rashtriya Swasthya Bima Yojana (RSBY), a health insurance scheme launched by the Government of India. 7

7. (a) Examine any seven underwriting risks associated with premium-related risk facing the insurance companies. Also, highlight any seven key components of claims risk that insurers need to manage effectively. 7

(b) Examine the significance of loss control as a method for managing risk. Also, briefly analyse and describe the major objectives of loss control in the insurance business. 7

8. (a) Mr. X has recently joined M/s IBS Bank as a Probationary Officer. During his preparation of bank examinations, he has not properly understood the concept of "Capital Adequacy Ratio". After the closure of business hours, he requests the branch head, Mr. Prasad of M/s IBS Bank, to explain the importance of Capital Adequacy Ratio (CAR)/ Capital to Risk Assets Ratio (CRAR) and how it is calculated. The branch head provided the following data of the bank for arriving at CAR / CRAR.

		(₹ in crores)
i)	Tier-1 Capital	2,01,488
ii)	Tier-2 Capital	50,755
iii)	Credit Risk Weighted Assets	15,73,578
iv)	Market Risk Weighted Assets	1,79,107
v)	Operational Risk Weighted Assets	1,82,585

Assume that you are the branch head of M/s IBS Bank. You are required to explain the following to Mr. X:

What is the importance of CAR or CRAR? Based on the above information, calculate Capital Adequacy Ratio (CAR) for M/s IBS Bank. 7

(b) M/s Zenith Innovations Pvt. Ltd. is a company specializing in the production and distribution of advanced composite materials and laminates. The company has initiated plans to establish a new manufacturing unit, with project planning already underway. As part of this initiative, Zenith Innovations Pvt. Ltd. entered into an agreement to acquire specialized equipment from M/s Horizon Technologies Ltd., based in Germany, for a total cost of € 6,00,000. This equipment was intended for installation at the company's facility in Gujarat. To ensure its safe and secure transit from the port of origin to Gujarat, the company obtained a marine cargo insurance policy (Specific Voyage Policy) with a sum insured of ₹ 6,50,00,000 to cover any loss or damage during transportation. The premium for this policy was duly paid to finalize the insurance contract. Additionally, Zenith Innovations Pvt. Ltd. secured a second marine cargo insurance policy from another insurer for the same sum insured and under nearly identical terms and conditions.

The equipment arrived at Chennai Port and was subsequently transported to the company's warehouse in Gujarat. However, upon unpacking, it was discovered that the equipment had sustained significant damage during transit. Specifically, the primary compressor unit of the composite fabricator was fractured, and the exhaust manifold was irreparably bent. Zenith Innovations Pvt. Ltd. promptly notified both insurers of the damage and requested for a surveyor's assessment, estimating the loss at ₹ 75,00,000.

On the basis of the above facts, analyze the following:

(i) Is it permissible for Zenith Innovations Pvt. Ltd. to obtain multiple marine insurance policies for the same equipment? In insurance terminology, how is Zenith Innovations Pvt. Ltd. classified?

(ii) Evaluate the admissibility of the claim and determine which insurer is liable for the loss.

(iii) Is there an insurance product available to cover the project before the commencement of operations? Discuss in brief. 7