

FINAL EXAMINATION

June 2026

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.

All workings should form part of the answer.

Whenever necessary, candidates may make appropriate assumptions and clearly state them in the respective answers.

Answer Question No. 1 and any five from Question No. 2 to Question No. 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) Which of the following is not a primary type of risk generally faced by banks?
- (A) Credit Risk
 - (B) Market Risk
 - (C) Operational Risk
 - (D) Agricultural Risk
- (ii) Which of the following is a major component of Interest Rate Risk faced by banks?
- (A) Credit default risk
 - (B) Liquidity adjustment risk
 - (C) Repricing risk
 - (D) Legal risk
- (iii) Which of the following is the primary objective of Credit Risk Management in banks?
- (A) To eliminate all types of risks in banking operations like Treasury, Securities, Investments, etc.
 - (B) To ensure that loans are sanctioned quickly without detailed appraisal and documentation of the Loans
 - (C) To maintain optimal balance between risk and return while minimizing potential losses from default
 - (D) To avoid lending to all new customers
- (iv) Which of the following is an example of operational risk in a bank?
- (A) Decline in the value of government securities due to interest rate changes
 - (B) Default by a corporate borrower on a term loan as well as working capital advance
 - (C) Financial loss due to a cyber-attack on the bank's core banking system
 - (D) Loss arising from changes in inflation rates

- (v) Which of the following principles ensures that an insurance contract is based on complete honesty and disclosure by both parties?
- (A) Principle of Indemnity and Guarantee
 - (B) Principle of Insurable Interest
 - (C) Principle of Utmost Good Faith
 - (D) Principle of Subrogation
- (vi) The life insurance business in India was nationalized in 1956, leading to the formation of
- (A) General Insurance Corporation of India.
 - (B) Life Insurance Corporation of India.
 - (C) Insurance Regulatory and Development Authority of India.
 - (D) National Insurance Academy.
- (vii) Which of the following insurance intermediaries represents the policyholder rather than the insurance company?
- (A) Corporate Agent
 - (B) Individual Insurance Agent
 - (C) Insurance Broker
 - (D) Surveyor and Loss Assessor
- (viii) Which government scheme aims to provide health insurance coverage to economically weaker sections in India?
- (A) Health Insurance introduced by Life Insurance Corporation of India
 - (B) Ayushman Bharat Pradhan Mantri Jan Arogya Yojana
 - (C) Health Insurance introduced by Insurance Regulatory and Development Authority of India
 - (D) Employees' Provident Fund Organisation Health Insurance Plan for migrant labour
- (ix) In India, risk management practices of insurance companies, including solvency requirements and underwriting norms, are primarily governed by
- (A) Reserve Bank of India with the help of IRDAI and IBBI.
 - (B) Insurance Regulatory and Development Authority of India.
 - (C) Securities and Exchange Board of India with NSE and BSE.
 - (D) Ministry of Corporate Affairs alone.

- (x) In the context of insurance underwriting, which of the following statements correctly explains the role of Probable Maximum Loss (PML)?
- (A) PML represents the minimum loss expected from a risk and is used to reduce premium charged to clients.
 - (B) PML assists underwriters in estimating the likely upper bound of loss under adverse conditions and in deciding the extent of risk retention and reinsurance.
 - (C) PML is used only for calculating claim settlements and has no relevance in underwriting decisions.
 - (D) PML is a regulatory requirement used exclusively for determining solvency margins of insurers.

- (b) **Read the following scenario (case study) and answer the questions:** 2×5=10

Sudarshan Bank Ltd., a growing private sector bank, expanded its corporate lending portfolio aggressively in the infrastructure and real estate sectors over a two-year period. The bank sanctioned large term loans to several mid-sized construction companies based on projected cash flows and collateral valuations that later turned out to be overstated. Due to delays in project execution and cost overruns, many borrowers began missing scheduled repayments, leading to a sharp rise in the bank's Non-performing assets (NPAs). The credit appraisal process was later found to have relied heavily on external credit ratings without adequate internal risk assessment and stress testing.

During its internal audit and supervisory inspection by the Reserve Bank of India, Sudarshan Bank was advised to strengthen its credit risk management framework. The bank initiated corrective steps such as tightening due diligence procedures, implementing borrower risk rating models, improving collateral monitoring, and enhancing early warning signal (EWS) systems. The board also aligned its credit policies with international standards recommended by the Basel Committee on Banking Supervision to ensure better capital adequacy and risk-weighted asset management.

Based on the above scenario answer the following questions and **choose the correct option from the four alternatives given:**

- (xi) The primary reason for the rise in NPAs in Sudarshan Bank was:
- (A) increase in interest rates of the bank based on the repo rates of RBI
 - (B) weak credit appraisal and overreliance on external ratings
 - (C) sudden withdrawal of deposits by the customers due to festival seasons
 - (D) excess investment in government securities through Statutory Liquidity Ratio
- (xii) Which of the following is an important tool used by banks to assess borrower's creditworthiness?
- (A) Cash Reserve Ratio maintained by the bank with RBI
 - (B) Internal Credit Rating System
 - (C) Repo Rate declared by the RBI through Monetary Policy
 - (D) Statutory Liquidity Ratio maintained by the banks

- (xiii) Early Warning Signals (EWS) in credit risk management help banks to
- (A) detect fraud in treasury operations of the bank.
 - (B) identify potential loan defaults at an early stage.
 - (C) monitor foreign exchange fluctuations due to demand and supply.
 - (D) improve customer service quality of the bank and market penetration.
- (xiv) Collateral risk in bank lending primarily refers to
- (A) risk of changes in market interest rates from time to time based on the repo rates.
 - (B) risk that pledged security may not retain adequate value or enforceability.
 - (C) risk of liquidity shortage in the bank due to mismatch in deposits and advances.
 - (D) risk arising from operational failures due to increase in operational risk of the bank.
- (xv) According to international banking standards, credit risk is primarily covered under which regulatory framework?
- (A) Basel Norms on Capital Adequacy
 - (B) Companies Act provisions on Corporate Loans
 - (C) SEBI Listing Regulations with regard to Corporate Lending
 - (D) Payment and Settlement Systems Act Designed Retail Products

Section-B

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

Each question carries 4 marks.

14×5=70

2. (a) **Explain** the major obstacles faced by banks in managing risk within an environment characterized by changing regulations, rising customer expectations, cyber threats, identity theft, inefficient internal processes and increasing competition. 7
- (b) “Green Bonds are an important ESG-compliant source of finance, but their growth in India is still constrained by several practical issues.” **Explain** this statement in the context of the Green Bond market in India, highlighting its development, regulatory framework, benefits and challenges. 7
3. (a) During the annual statutory audit of Zenith Commercial Bank, the Audit Committee expressed serious concerns over the rising volume of Non-Performing Assets (NPAs) in the bank’s global loan portfolio. The directors noted a sharp decline in the bank’s net profit and requested the Chief Risk Officer clarify how NPAs damage the financials and to present the exact regulatory provisioning matrix required to ensure full compliance.

As a Cost and Management Accountant assisting the Chief Risk Officer, prepare a brief note for the Audit Committee explaining:

- (i) the two-fold impact of NPAs on the profitability of the bank.
- (ii) the RBI provisioning norms for Loss Assets, Substandard Assets and Doubtful Assets.
- (iii) the specific provisioning rates as mandated for various categories of Standard Assets. 7

- (b) Global Horizon Bank, acting as the lead arranger for a small international banking syndicate, has provided a USD 500 million term loan to a highly profitable infrastructure project in the Republic of Zeta. The project is economically viable and generates ample local revenue. However, the borrower recently missed its dollar-denominated instalment because the government of Zeta suddenly imposed strict capital controls, blocking all foreign exchange remittances.

The banking syndicate is now planning to decide whether they are facing a complete collapse of the agreement or if they should negotiate a temporary postponement of payments.

As a Risk Advisory Consultant to Global Horizon Bank, address the following:

- (i) **Identify** the two primary risks considered when making loans to foreign borrowers, and state which specific risk has materialized in this scenario.
- (ii) **Differentiate** between “loan repudiation” and “loan rescheduling” in the context of international lending.
- (iii) **Explain** the reasons why the syndicate will find it easier to reschedule this debt as a syndicated bank loan rather than issuing international bonds. 7

4. (a) **Define** operational risk as per the Basel Committee on Banking Supervision. **Briefly explain** the major categories of operational risk events that can lead to significant losses in banks. 7

- (b) A bank is required to maintain sufficient High-Quality Liquid Assets (HQLA) to meet its net cash outflows over a 30-day stress period. The bank currently holds ₹ 500 crore in HQLA. Its estimated total cash outflow over the next 30 days is ₹ 650 crore, while expected cash inflows are ₹ 200 crore.

The bank needs to compute its Liquidity Coverage Ratio (LCR) to assess whether it complies with regulatory liquidity requirements and to evaluate its short-term liquidity position.

Required:

- (i) **Calculate** the bank’s Liquidity Coverage Ratio.
- (ii) **Determine** whether the bank meets the minimum regulatory requirement of 100% LCR.
- (iii) **Suggest measures** which the bank should take to improve its LCR, if it falls below the required level. 7

5. (a) A commercial bank has invested ₹ 1,000 Crores in long-term government bonds, considering them risk-free for capital adequacy purposes. However, due to a widening fiscal deficit and rising public debt, international rating agencies downgraded the country's sovereign rating. As a result, the market value of government securities declined sharply, leading to mark-to-market losses in the bank's investment portfolio and a fall in its capital adequacy ratio.

The bank also observed an increase in interest rates as the government began borrowing more heavily from the market. This further reduced the value of its existing fixed-rate bond holdings, exposing the bank to both sovereign risk and interest rate risk simultaneously.

Based on the above information, **answer the following Questions:**

- (i) What type of sovereign risk is reflected in this case?
- (ii) How did sovereign risk affect the bank's financial position?
- (iii) What risk management strategies should the bank adopt to reduce sovereign risk exposure? 7

- (b) The Insurance Regulatory and Development Authority of India (IRDAI) adopts a prudential approach to supervision of insurance companies, including on-site and off-site inspections.

Required:

- (i) Explain the objectives and scope of on-site inspection and off-site inspection/surveillance conducted by IRDAI.
- (ii) State the role of auditors and management in ensuring compliance during the supervisory process. 7

6. (a) A Point of Sales Persons (POSP) model is an important innovation introduced by IRDAI to expand insurance penetration through simplified products.

Required:

- (i) Explain the concept and objective of POSP model in the insurance sector.
- (ii) State the eligibility conditions and regulatory requirements for appointment of a POSP.
- (iii) Describe the types of insurance products that can be sold by POSP. 7

- (b) Postal Life Insurance (PLI) offers various life insurance products tailored to different subscriber needs. Two of its most prominent offerings are "Suraksha" (Whole Life Insurance) and "Suvidha" (Convertible Whole Life Insurance) schemes. While they share several fundamental characteristics, they differ significantly in their core mechanics and timelines.

Required:

- (i) Differentiate between the Suraksha and Suvidha schemes based on:
1. Scheme Payout Mechanics
 2. Policy Conversion Rules
 3. Loan Facility Timelines
- (ii) Enumerate any four distinct features and requirements that are strictly common to both the schemes.

7

7. (a) The recent instances of insolvency among insurance companies have made it imperative for regulators to reconsider risk management frameworks and ensure that insurers are adequately capitalized under the "Risk Based Capital" approach.

In the context of the above statement:

- (i) Explain the three primary areas of risk faced by non-life insurance companies and provide at least three specific examples/ factors for each.
- (ii) Enumerate the key methods by which insurance companies actively manage these risks.

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- (b) With the rapid digitization of financial services and sensitive data handling, Information Technology (IT) Risk Management has become a critical pillar of governance for insurance companies. Explain five essential steps to Information Technology Risk Management for insurance companies.

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8. (a) Shakti Commercial Bank Ltd., a mid-sized public sector bank in India, expanded aggressively into corporate lending between 2020 and 2023. The bank sanctioned large term loans to infrastructure and steel companies based on optimistic cash-flow projections.

As of 31 March 2026, the bank's loan portfolio stood at ₹ 85,000 crore, out of which:

- Standard assets: ₹ 72,000 crore
- Sub-standard assets: ₹ 6,000 crore
- Doubtful assets: ₹ 4,500 crore
- Loss assets: ₹ 2,500 crore

The Gross NPA ratio increased from 6.5% in 2023 to 15.3% in 2026. The bank had to make heavy provisions, which reduced its net profit and capital adequacy. The bank's Risk Management Committee raised concerns about poor credit appraisal and inadequate monitoring of borrower's financials.

The bank operates under prudential norms prescribed by the Reserve Bank of India (RBI).

Required:

- (i) **Calculate** the total amount of Non-Performing Assets (NPAs) of the bank.
- (ii) **Analyze** what are the key reasons for the rise in credit risk in this case?
- (iii) **Suggest** risk management measures that the bank should adopt to control credit risk in future. 7

- (b) Mr. Rajesh Verma, a 42-year-old salaried employee in Pune, purchased a family floater health insurance policy from Star Health and Allied Insurance in 2022 with a sum insured of ₹ 10 lakh.

In July 2025, his wife was hospitalized for gallbladder surgery at a network hospital. The hospital initiated a cashless claim of ₹ 2.8 lakh. However, the insurer approved only ₹ 1.6 lakh, citing:

- Sub-limits on room rent
- Non-medical expenses
- Partial disallowance of surgical consumables

Mr. Verma had to pay the remaining amount from his own pocket. He filed a complaint with the insurer, but the claim revision was rejected. He is now considering approaching the Insurance Ombudsman under the regulations of Insurance Regulatory and Development Authority of India.

Required:

- (i) What are the possible reasons for partial claim settlement in health insurance policies?
- (ii) Was the insurer justified in settling the claim partially in this case? Explain.
- (iii) What grievance redressal mechanisms are available to the policyholder, Mr. Rajesh Varma?
- (iv) What precautions should policyholders take while purchasing health insurance to avoid such disputes? 7