

## FINAL EXAMINATION

June 2024

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) Which of the following is the correct definition of Exposure at Default (EAD)?
- (A) It measures the remaining economic maturity of the exposure.
  - (B) It is the estimated amount outstanding in a loan commitment if default occurs.
  - (C) It measures the proportion of the exposure that will be lost if default occurs.
  - (D) It measures the likelihood that the borrower will default over a given time horizon.
- (ii) What is the range of Counter Cyclical Buffer as per BASEL-III framework?
- (A) 0% - 1%
  - (B) 0% - 1.5%
  - (C) 0% - 2%
  - (D) 0% - 2.5%
- (iii) The risk that arises from the possibility of non-payment of loans by the borrowers is known as \_\_\_\_\_.
- (A) Credit Risk
  - (B) Market Risk
  - (C) Moral Hazard
  - (D) Liquidity Risk

- (iv) The risk that arises due to worsening of credit quality is \_\_\_\_\_.
- (A) Intrinsic Risk
  - (B) Credit Spread Risk
  - (C) Portfolio Risk
  - (D) Counterparty Risk
- (v) In which policy, the insurer agrees to pay the assured or his nominees a **specified** sum of money on his death or on the maturity of the policy, whichever is **earlier**?
- (A) Money Back Plan
  - (B) Endowment Plan
  - (C) Annuity Policy
  - (D) Unit-linked Insurance Plan
- (vi) The risk which arises because of change in major economic, social, cultural and political factors is \_\_\_\_\_.
- (A) Particular Risk
  - (B) Fundamental Risk
  - (C) Speculative Risk
  - (D) Dynamic Risk
- (vii) When the amount for which a subject matter is insured is more than its actual value, it is called \_\_\_\_\_.
- (A) Premium
  - (B) Cover note
  - (C) Reinsurance
  - (D) Double Insurance
- (viii) \_\_\_\_\_ is a voluntary termination of the contract by the policy holders.
- (A) Report
  - (B) Surrender
  - (C) Prospectus
  - (D) Claim
- (ix) Which of the following method reduces the chance of loss to zero?
- (A) Risk Transfer
  - (B) Risk Avoidance
  - (C) Risk Retention
  - (D) Risk Reduction

(x) The \_\_\_\_\_ is formed with four subsidiary companies.

- (A) Life Insurance Corporation of India
- (B) ICICI Prudential Life Insurance Company
- (C) General Insurance Corporation of India
- (D) Bajaj Allianz General Insurance Company

(b) Based on the following case study, you are required to answer the question nos. (i) to (v). 2×5=10

Extra Credit Bank Ltd. furnishes following details:

Capital funds	(₹ crore)
(I) Tier-I capital	55
(II) Tier-II capital	50
Total Capital Funds	105
Total risk weighted assets (RWAs)	1140
(I) RWAs for credit risk	1000
(II) RWAs for market risk	140

Minimum required Capital Adequacy Ratio is 9%.

During the year, the Forex division of bank has lent 1 million euros to X and 5 million euros to Y. Over the next year, the Probability of Default (PD) for X is 0.2 and for Y is 0.3. The PD of joint default is 0.1. The loss given default is 40% for X and 60% for Y.

The bank has an exposure of ₹ 100 lakhs with one of its corporate customer Sun Star Ltd. which is backed by a lien on a fixed deposit of ₹ 30 lakhs. There is no maturity mismatch.

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

(i) Total Capital Adequacy Ratio (CAR)—

- (A) 4.39%
- (B) 4.82%
- (C) 9.21%
- (D) 10.50%

(ii) Minimum capital required to support credit risk—

- (A) ₹ 105 crores
- (B) ₹ 102.60 crores
- (C) ₹ 90 crores
- (D) ₹ 15 crores

- (iii) Capital available to support Market Risk—
- (A) ₹ 102.60 crores
  - (B) ₹ 90 crores
  - (C) ₹ 15 crores
  - (D) ₹ 12.60 crores
- (iv) The expected loss of default in one year for the bank—
- (A) Euro 0.08 million
  - (B) Euro 0.098 million
  - (C) Euro 0.90 million
  - (D) Euro 0.98 million
- (v) The net exposure qualifying for Capital Adequacy in the case of Sun Star Ltd.—
- (A) ₹ 00 lakh
  - (B) ₹ 30 lakhs
  - (C) ₹ 70 lakhs
  - (D) ₹ 100 lakhs

### Section-B

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

Each question carries 14 marks.

14×5=70

2. (a) How does risk management contribute to creating value for a company despite being a significant expense? 7
- (b) What is Market Risk? Explain the two broad methodologies in measuring market risks for capital adequacy offered by the Basel II Framework. 7
3. (a) What should be the ideal organizational setup for liquidity risk management in a bank, considering strong commitment to integrate basic operations and strategic decision making with risk management from the top management? 7
- (b) What is Bankruptcy Risk? What are the indicators that suggest a company is at risk of bankruptcy? What strategies do companies employ to mitigate insolvency risk? 7
4. (a) **Examine** the types of loan commitments, and also discuss its advantages and disadvantages. 7
- (b) Modern Bank has provided the following information relating to its advance portfolio as of March 31, 2024:
- Total advances of ₹ 40,000 crores.
- Gross NPA 9% and Net NPA 2%.
- Consider that all the standard loan accounts represent general advances.

Based on this information, **analyze** the following:

- (i) What is the amount of provision for standard loan accounts and the provision on NPA accounts?
  - (ii) What is the total amount of provisions on total advances, including the standard accounts?
  - (iii) What is the amount of gross NPA?
  - (iv) What is the amount of net NPA?
  - (v) What is the provision coverage ratio for NPA? 7
5. (a) Smart Bank has paid up capital of ₹ 100 crores, Free Reserves of ₹ 300 crores, Provisions and Contingencies Reserves of ₹ 200 crores, Revaluation Reserves of ₹ 300 crores, Perpetual Non-Cumulative Preference Shares of ₹ 400 crores, and Subordinated Debt of ₹ 300 crores. The Risk Weighted Assets for Credit and Operational Risk are ₹ 10,000 crores and for Market Risk ₹ 4,000 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 Fund
  - (iv) The Capital Adequacy Ratio of the Bank
  - (v) The amount of minimum capital to support Credit and Operational Risk 7
- (b) To ensure the proper functioning of an insurance contract, the insurer and the insured have to uphold certain principles of Insurance. **In this context, explain** with example the following:
- (i) Principle of Utmost Good Faith
  - (ii) Principle of Proximate Cause
  - (iii) Principle of Indemnity 7
6. (a) Explain Facultative Reinsurance and Treaty Reinsurance. What are the different types of Treaty Reinsurance? 7
- (b) **Demonstrate** a comprehensive overview of the Pradhan Mantri Jan Arogya Yojana- Ayushman Bharat Health Scheme rolled out by the Government of India in September 2018. 7
7. (a) The risk assessment measures various risks and helps an insurance company define the ones that are most significant. **Explain** with example what are the two parameters used to measure every risk 7
- (b) **Discuss** the provisions relating to the appointment of Actuary in the case of:
- (i) life insurance
  - (ii) health insurance. 7

8. (a) The Management of Bridge Bank is worried about the movement of interest rates across the globe and its impact on the financial health of the industry to which it belong. In order to know the sensitivity of interest rates and its impact, the Management has approached you with the following details relating to its Balance Sheet as on March 31, 2024:

Capital ₹ 4,000 crores

Reserves ₹ 24,000 crores

Current Accounts ₹ 1,20,000 crores

Saving Bank Accounts ₹ 1,20,000 crores

Term Deposits ₹ 1,20,000 crores

Borrowing from RBI ₹ 12,000 crores

Cash Balances ₹ 27,600 crores

Balances with other Banks ₹ 60,000 crores

Investment in Securities ₹ 60,000 crores

Bills Payable ₹ 80,000 crores

Cash Credit ₹ 80,000 crores

Term Loan ₹ 80,000 crores and

Fixed Assets ₹ 12,400 crores

Total Assets and Total Liabilities ₹ 4,00,000 crores.

The term loans have a fixed rate of interest.

As a Management Accountant, you are tasked with creating a detailed report for management, addressing the following points based on the provided information:

- (i) **Determine** the value of interest rate-sensitive assets.
  - (ii) **Assess** the amount of interest rate-sensitive liabilities.
  - (iii) **Identify** the magnitude and nature of the gap between rate-sensitive assets and liabilities in this scenario.
- (b) Mr. Neel residing in Delhi purchased on 9th May, 2023 a Honda Car for ₹ 8,00,000. The vehicle was registered as DL 2CJ 8745. He, thereafter, applied for a comprehensive insurance policy with Pioneer General Insurance Co. Ltd. and after ascertaining the annual premium, issued a cheque in favour of the insurance company for ₹ 19,000 as premium for a comprehensive coverage of the vehicle for a period of twelve months commencing from 11th May, 2023. The insurance company accordingly issued Mr. Neel with a comprehensive motor policy for the period from 11th May, 2023 to 10th May, 2024.

On presentation of the cheque issued by Mr. Neel, it was dishonoured on 14th May, 2023 on the ground "Insufficiency of Funds" and an intimation was sent to Mr. Neel by the insurance company on 16th May, 2023. Meanwhile, while returning from his office on 15th May, 2023, the vehicle that was driven by Mr. Neel met with an accident and suffered damages. A third-party walking on the road also sustained injuries and had to be hospitalised. The accident was reported by Mr. Neel to the police and an FIR was also lodged.

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

- (i) Does Mr. Neel have a valid claim in respect of damage to his car DL 2CJ 8745 as a result of the above accident?
  - (ii) Does the person walking on the road who sustained injuries and had to be hospitalised, have a right as third-party to claim for injury under the policy? 7
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