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.

SECTION – A (Compulsory)

I. Choose the correct option: **[10 x 2 = 20]**

(i) Reinvestment Risk Exists

A. Bond with Call Option

B. For A Bond with Coupon Rate

C. For A Bond with A Put Option

D. For A Bond with Hold Option

(ii) What is a desirable Provision Coverage Ratio (PCR) for a bank?

A. Above 50%

B. Below 20%

C. Above 70%

D. Below 30%

(iii) Financial distress can be best described by which of the following situations in which the firm is forced to take corrective action?

A. Cash payments are delayed to creditors.

B. The market value of the stock declines by 10%.

C. The firm's operating cash flow are insufficient to pay current obligations.

D. Cash distributions are eliminated because the board of directors considers the surplus account to be low.

(iv) "Payments credited to the wrong account" is an example of which Risk?

A. Credit Risk.

B. Operational Risk.

C. Market Risk.

D. Liquidity Risk.

(v) Pure risk was grouped

A. Property Risk

B. Personal Risk

C. Liability risk

D. All the above

(vi) What is the distribution fee to MISP for vehicles other than 2-wheelers, if directly engaged by the insurer:

A. 22.5% of Own Damage portion.
B. 19.5% of Own Damage portion
C. 19.5% of Total Premium
D. 22.5% of Total Premium.

(vii) What is the minimum sum assured for the Anticipated Endowment Assurance (Sumangal) policy?

A. ₹ 50,000
B. ₹ 20,000
C. ₹ 30,000
D. ₹ 10,000

(viii) Under which type of reinsurance is the ceding company protected if its loss ratio exceeds a predetermined threshold.

A. Excess of Loss Ratio Treaty Reinsurance
B. Excess of Loss Treaty Reinsurance
C. Pools Treaty Reinsurance
D. Surplus Treaty Reinsurance

(ix) _____ is a whole life policy that insures two lives with the proceeds payable on the second (later) death.

A. Group life insurance
B. Joint life insurance
C. Prepaid insurance
D. Survivorship life insurance policy

(x) Which of the following method reduces the chance of loss to zero?

A. Risk Transferring
B. Risk retention
C. Risk avoidance
D. Risk reduction

Answers:

i	ii	iii	iv	v	vi	vii	viii	ix	x
a	c	c	b	d	b	b	a	d	c

(b) Based on the following case study, you are required to answer the questions no.(i) to (v) **[5 x 2 = 10]**

International Bank has paid up capital of ₹ 200 Crores, free reserves of ₹ 600 Crores, provisions and contingencies reserves ₹ 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.

(i) What is the amount of Tier-1 capital?

A. ₹ 1,600 Crores

B. ₹ 1,500 Crores

C. ₹ 1,800 Crores

D. ₹ 1,220 Crores

(ii) Calculate the amount of Tier-2 capital?

A. ₹ 1,800 Crores

B. ₹ 1,600 Crores

C. ₹ 1,220 Crores

D. ₹ 1,500 Crores

(iii) What is the capital adequacy ratio of the bank?

A. 9%

B. 9.65%

C. 10.05%

D. 10.07%

(iv) What is the amount of Tier-1 capital fund, to support Market Risk?

A. ₹ 700 Crores

B. ₹ 900 Crores

C. ₹ 500 Crores

D. ₹ 370 Crores

(v) What is the amount of Tier-2 capital fund, to support Market Risk?

A. ₹ 900 Crores

B. **₹ 320 Crores**

C. **₹ 700 Crores**

D. **₹ 500 Crores**

Answer:

i	ii	iii	iv	v
a	c	d	a	b

Section – B

(Answer any five questions out of seven questions given. Each question carries 14 Marks)

[5 x 14 = 70]

2. (a) Identify the primary obstacles to implementing risk management practice in banks. [7]

(b) Explain the concept of junk bond and discuss it pros and cons. [7]

Answer:

2. (a) Obstacle to Risk Management in Banks:

- **Regulatory Changes**: The financial services regulatory landscape is in a constant state of flux, with new regulations or amendments to existing regulations being handed down every month in response to political turmoil, public sentiment, emerging technology, and more. It can be challenging for banks to comply with the ever-changing rules, but comply they must, lest they expose themselves to compliance risk and the potentially severe consequences that accompany it.

  Compliance risk management in banks essentially boils down to three basic

  steps:

  i. The bank becomes aware of the regulation.

  ii. The bank works to understand the impact of the regulation on its core business model.

  iii. The bank implements the necessary changes to ensure compliance.

- **Rising Customer Expectations**: Today's customer is expert at using their personal device for tasks they would otherwise perform manually, including banking. This has led mobile banking apps to become ubiquitous-in fact, you'd be hard-pressed to find a financial institution that doesn't have a mobile app. That said, these apps are often treated as a supplement to a bank's brick-and-mortar offerings rather than a one-stop-shop. Even for more tech-savvy institutions, their mobile app often pales in comparison to that of their online banking platform. This is especially frustrating for younger customers, who are accustomed to using their phones for just about everything and expect their bank's mobile solution to be just as functional as its online platform or branch operations. A truly full-service mobile banking app not only has the power to increase customer loyalty, it also encourages more spontaneous interactions (and transactions) and enables banks to monitor customer activity.

- **Cybersecurity Breaches**: As the financial services industry has become increasingly tech-based, cybersecurity has become part of the cost of doing business. Cybersecurity threats such as malware, phishing, and Denial of Service attacks grow more sophisticated with each passing day, to the point where legacy systems implemented before the rise of Big Data analytics are incapable of fending them off. As a result, banks' cybersecurity administrators often find themselves overwhelmed by false positives and spend a significant amount of time investigating things that aren't actual problems. The good news is that although cyberattacks have become more sophisticated, so, too, has the technology used to combat them. Banks can now use artificial intelligence to perform rapid pattern recognition analytics across millions of questionable activities and filter out much of the noise.

- **Fraud & Identity Theft**: Similar to cybersecurity, banks' security admins are often overwhelmed by the number of false positives for fraud and identity theft. The only real difference between this bank risk and the last is that fraud and identity theft false positives are visible to customers and can interfere with customers' ability to complete transactions and, in some cases, cost them money. For this reason, false positives are a significant detriment to bank operations and detract from the overall

  Just as AI helps prevent cybersecurity breaches and false positives, it can also help with fraud and identity theft. Using AI, banks can detect potential incidents of fraud and identity theft to a far more refined degree than ever before.

- **Inefficient Internal Processes:** Every year, banks need to look for ways to offset the increasing cost of operations to prevent liquidity risk or business risk. Automation and stringent practices for underwriting, servicing, and monitoring go a long way not only toward reducing costs, but also toward preventing operational risk, credit risk, and compliance risk. Automation, in particular, makes it easier for banks to achieve regulatory compliance. For example, with custom automation functions configured to meet requirements outlined in such regulations as the Beneficial Ownership Rule.

- **Increasing Competition:** In today's world, traditional banks face increasing competition from internet banks hungry to take market share and tech companies such as Apple, Amazon, and Google that are breaking into the finsery industry. This is especially problematic for local and regional banks, which can't make up for lost customers by simply expanding their geography.To counter this encroachment, traditional banks need to learn to interact with their customers in the same way that their non-traditional competitors do-a a shift that often requires them to rethink their customer engagement strategy from the ground up.

(b) A junk bond, also known as a speculative-grade bond, is a high-yielding fixed income security with a high risk of default on payment. When buy bonds, lending money to the bond issuer-a company or a government entity-that promises to pay back with interest when the bonds mature. The thing is, not all companies can deliver on that promise. That's where bond ratings come in.They are letter grades issued by an independent bond ratings agency-Standard & Poor, Moody's or Fitch-that suggest the likelihood a company will repay what it borrows. Like in school, A's and B's are generally better and indicate a high chance of repayment, while lower letter grades signal a company's bonds may be a risky bet.

Securities with a rating of BBB (or Baa on Moody's scale) or higher are considered "investment-grade" bonds, meaning the bond rating agency thinks it's pretty likely investors will get their money back. But bonds with a rating below BBB/Baa have a higher likelihood of failure to repay their debts, and they're called speculative-grade or non-investment grade bonds. They're normally issued by companies that are relatively new or that have faced recent financial difficulties.

Junk Bond Pros:

i. Junk bonds have higher potential for bigger profits. Because of the increased risk, junk bonds tend to have higher yields than investment-grade bonds.
ii. Bonds may appreciate if an issuer improves. If a company is actively paying down its debt and improving its performance, the bond can appreciate in value as its issuing company's rating improves.
iii. More dependable than individual stocks. While they're riskier than investment-grade bonds, they may not be as risky as individual stocks. For example, if a company goes bankrupt, bondholders are paid back before stockholders.

Junk Bond Cons:

i. Junk bonds have higher default rates. Junk bonds typically have a higher potential for default than investment-grade bonds. According to S&P Global Ratings, the default rate for junk bonds was 5.5% in 2020. By contrast, the default rate for investment-grade bonds is 0.00%.
i. Lack of liquidity. High-yield bonds sometimes have liquidity issues, meaning it may be difficult to sell them for cash when need it.
ii. Junk bond values can fall if credit ratings are downgraded. The value of junk bonds can decrease. If a company's credit rating drops even lower, the bond will become worth even less.

3. **(a) Critically assess the steps taken by financial institutions to manage and reduce Non- Performing Assets (NPA).** **[7]**

(b) Demonstrate how a company can identify early warning signs of potential bankruptcy and outline the measures it can take to reduce insolvency risk. **[7]**

Answer:

3.(a) **i. Insolvency and Bankruptcy Code (IBC):** With the RBI's push for the IBC, the resolution process is expected to quicken while continuing to exercise control over the quality of the assets. There will be changes in the provision requirement with the requirement for the higher proportion of provisions going to make the the books better.

ii. Credit Risk Management: This involves credit appraisal and monitoring accountability and credit by performing various analyses on profit and loss accounts. While conducting these analyses, banks should also do a sensitivity analysis and should build safeguards against external factors.

iii. Tightening Credit Monitoring: A proper and effective Management Information System (MIS) needs to be implemented to monitor warnings. The MIS should ideally detect issues and set off timely alerts to management so that necessary actions can be taken.

iv. Amendments to Banking Law to give RBI more power: The present scenario allows the RBI just to conduct an inspection of a lender but doesn't give them the power to set up an oversight committee. With the amendment to the law, the RBI will be able to monitor large accounts and create oversight committees.

v. More "Haircuts" for Banks: For quite some time, PSU lenders have started putting aside a large portion of their profits for provisions and losses because of NPA. The situation is so serious that the RBI may ask them to create a bigger reserve and thus, report lower profits.

vi. Stricter NPA recovery: It is also discussed that the Government needs to amend the laws and give more power to banks to recover NPA rather than play the game of "wait-and-watch."

vii. Corporate Governance Issues: Banks, especially the public sector ones, need to come up with proper guidance and framework for appointments to senior-level positions.

viii. Accountability: Lower-level executives are often made accountable today; however, major decisions are made by senior-level executives. Hence, it becomes very important to make senior executives accountable if Indian banks are to tackle the problem of NPAs.

(b) The following are often signs of trouble:

- Dwindling cash and/or losses, especially if they represent a trend
- Abrupt dismissal of the company auditor
- Dividend cuts or the elimination of dividends
- Departure of senior management
- Insider selling, especially large or frequent transactions following negative news
- Selling off a product line to raise cash
- Cuts in perks like health benefits or pensions

How Companies Reduce Insolvency Risk: No company becomes insolvent overnight. If it looks like your business is headed in that direction, take steps to protect it.

- Focus on cash flow. Among other actions, this may involve invoicing promptly, recovering debts, renegotiating credit limits, renegotiating contracts with suppliers, selling assets (if necessary), and reducing the amount of cash tied up in stock.
- Reduce business expenses. Possibilities include cutting advertising and/or research and development, paying off debts earlier to lower interest on debt, reducing staff overtime, delaying the purchase of new or leased equipment.
- Keep your creditors in the loop. Discuss any problems you are having with payments and be ready to negotiate and compromise.
- Get good financial and legal advice. Consult the company›s accountant and lawyer, who should already be familiar with your business.

4. (a) Discuss the process involved in issuing Bank Guarantees and examine its types. [7]

(b) International Banks provided following information about its-NPA account as on Mar 31, 2022.

- **Total loans ₹ 40,000 Crores.**
- **Standard Accounts ₹38,000 Crores including Direct Agriculture and SME loans of ₹10,000 Crores.**
- **Sub-standard ₹800 Crores and out of which unsecured Sub-standard ₹200 Crores.**
- **Doubtful up to 1 Year ₹800 Crores and Doubtful above 1 year up to 3 years ₹200 Crores and**
- **Doubtful above 3 Years ₹120 Crores and Loss Accounts ₹80 Crores.**
- **All doubtful loans are fully secured.**

Based on the above information calculate the following:

(i) Provision on general accounts.
(ii) The amount of provision on sub-standard loan accounts.
(iii) The amount of provision on doubtful loan accounts. [7]

Answer:

4. (a) A Bank Guarantee or letter of guarantee is a fee-based credit facility extended by the banks to their customers. The non-fund-based facilities are the letter of guarantee or letter of credit by the banks wherein banks get fee income. Since there is no immediate outflow of funds from the banks they are also known as the non-fund-based facility. However, in the case of a non-fund-based credit facility, the bank has to discharge the financial liability of the contract agreed to the guarantee or documentary credit, if the contract is partly or fully not performed by the customer.

Financial guarantees: Financial guarantees are issued by the banks whenever a contract is awarded to their customer, who is generally a contractor of civil work or a supplier of goods, machinery, equipment by a Government Department or large industrial undertaking , the customer is under obligation to deposit cash security or earnest money as a token of due compliance of the terms and conditions of the contract. This cash security provided by the contractor or supplier is forfeited by the Government Department or the company which awarded the contract, in the event the contractor or supplier fails to comply with the terms stipulated in the sanction. The customer normally will have an option to furnish a bank guarantee instead of cash security, so that his working funds are not unnecessarily blocked. The guarantees issued by banks for the above purpose is called financial guarantee wherein the banks undertake to pay the guaranteed amount during a specified period on demand from the beneficiary.

Performance Guarantee: Performance guarantees are issued by the banks on behalf of a Service Contractor, who has to effectually perform all the conditions of the contract between him and the department/company that awarded the contract. The bank has to discharge the financial liability of the contract agreed in the guarantee, if the contract is partly or fully not performed by the customer. Such type of guarantee issued by the bank is called a Performance Guarantee. Many a time the terms of the contract may be highly technical and the bank is generally not expected to know the technical aspects of the contract. Therefore, the bank assumes only the financial liability of the contract. Since the issuance of a performance guarantee is more complicated and riskier, before issuing performance guarantees, the bank has to ensure that the customer has sufficient experience in the line of business and he has the capacity and means to carry out the obligation under the contract.

(b) (i) Provision on General accounts = ₹28,000 × 0.4% = ₹ 112 Crores + Provision on direct agriculture and SME accounts = ₹ 10,000 × 0.25% = 25 Crores. Total provision = ₹ 112 + ₹25 = ₹137 Crores.

(ii)Secured Sub-standard accounts = ₹ 600 × 15% = ₹90 Crores + Unsecured Sub-standard ₹ 200 × 25% = ₹ 50 Crores. Total Provision = ₹140 Crores

(iii)Doubtful Category-1 = ₹ 800 x 25% = ₹200 Crores + Doubtful Category -2 = ₹ 200 × 40% = ₹ 80 Crores + Doubtful Category -3 = ₹ 120 × 100 = ₹ 120 Crores. Total provision = ₹200 + ₹80 + ₹ 120 = ₹400 Crores

5. (a) Aspire Bank has paid up capital of ₹300 Crores, free reserves of ₹800 Crores, provisions and contingencies reserves ₹500 Crores, Revaluation Reserve of ₹700 Crores, Perpetual non-cumulative preference shares of ₹900 Crores, and Subordinated Debt of ₹700 Crores. The Risk Weighted Assets for Credit and Operational Risk are ₹25,000 Crores and for-Market Risk ₹10,000 Crores.

Based on the above information, calculate the following:

1. The amount of Tier-1 capital.

2. The amount of Tier-2 capital.

3. The amount of Fund

4. The capital adequacy ratio of the bank

5. The amount of minimum capital to support Credit and Operational Risk.

6. What is the amount of minimum Tier 1 and Tier 2 to support the credit and operational risk?

7. What is the amount of Tier-1 capital fund, to support Market Risk?

8. What is the amount of Tier-2 capital fund, to support Market Risk? [7]

(b) Identify the role of the Insurance Ombudsman in India, and how can policyholders utilize this service to address grievances with their insurance companies? [7]

Answer:

5. (a) 1. Tier-1 = Capital + Free Reserves + Perpetual non-Cumulative preference shares

= ₹300 Crores +₹800 Crores + ₹900 Crores = ₹2,000 Crores.

2.Tier II = (Provisions and Contingencies Reserves Maximum 1.25% of Risk Weighted Assets) + (Revaluation Reserve at 55% Discount) + (Subordinated Debts)

= ₹437.5 Crores + ₹315 Crores (₹700 Crores × 45%, at 55% discount) + ₹700Crores

= ₹1,452.05 Crores

3.Total Capital Fund = Tier - 1 capital + Tier - 2 capital

= ₹2000 Crores + ₹1452.5 Crores

= ₹3452.5 Crores

4.₹3452.5 Crores / ₹35000 Crores = 9.86%

5.₹25,000 Crores × 9% = ₹2,250 Crores

6.Tier 1 = ₹25,000 Crores x 4.5% = ₹1,125 Crores

Tier-2 = ₹25,000 Crores x4.5% = ₹1,125 Crores.

7.Total Tier-1 Minus Min Tier 1 for Credit and Operational risk

= ₹2,000 Crores – ₹1125 Crores = ₹875 Crores.

8.Total Tier-2 Minus Min Tier 2 for Credit and Operational risk

= ₹1452.50 Crores – ₹1125 Crores = ₹327.50 Crores.

(b) Insurance Ombudsman: Approach insurance company for any query or distress concerning policy. However, if feel issue is not resolved, Insured can approach the Insurance Ombudsman, which plays the role of grievance redressal forum for policyholders. It is a scheme launched by the Central Government for impartial, policyholders. It is a scheme launched by the Central Government for impartial, efficient, and cost-effective settlement of grievances of a policyholder. Insured can employ Insurance Ombudsman in case of:

- Claim settlement delay.
- Dispute over insurance premium.
- Total or partial rejection of the claim by the insurance company.
- Conflict over policy terms and conditions.
- Disputes over legal aspects of the policy.
- Disputes related to policy services.
- Any breach of rules or regulations of the Insurance Act, 1938.

Insured can lodge a complaint in writing, duly signed by the complainant or by employing any legal heirs or nominees. Insured can complain either in person or via email/post/fax along with a hard copy.

6. (a) Describe the eligibility criteria for an individual to become a Point of Sales Person (PoSP) in India. [7]

(b) Interpret the key benefits of investing in Postal Life Insurance. [7]

Answer:

6. (a) A Point of Sales Persons ('POSP') model is a recent innovation and is intended to sell simplified products in any area, Urban or Rural

- POSP can be appointed by an Insurer or Intermediary subject to the following conditions:
  - Every POSP shall be identified by an Aadhaar Number or PAN.
  - POSP shall be at least 10th pass
  - POSP shall undergo the 15-hour in-house training and pass the examination conducted by the concerned Insurer or intermediary – model syllabus prescribed by IRDAI.
- 1 Insurer or Intermediary shall upload the details of the POSP appointed in the Insurance Information Bureau database and preserve records for 5 years.
- l Restriction on products which can be sold by POSP – Products to be specially approved by IRDAI for POSPs:
- **General Insurance:**
- Motor Comprehensive Package policy & Third-Party Liability covers for 2-wheeler, Private Car and Commercial vehicles.
- Personal Accident
- Travel Insurance
- Home Insurance
- Indemnity-based Health insurance products (Maximum Sum Assured: Rs.5 lakhs; Maximum: 3products)
- **Life Insurance:**
- Pure Term Insurance with or without return of premium – no limit to Sum Assured (only Nonmedical)
- Non-par Non-linked Endowment policies (including Money back) & Health products (fixed benefits) only non-medical – maximum Sum Assured – Rs.10 lakhs (excluding ADB);
- Immediate Annuities.
- All Proposal forms and Policy documents to contain the Aadhaar Card or PAN of POSP
- Insurance company/Insurance Broker responsible for the acts of the POSP and liable for penal provisions under the Insurance Act in case of misconduct of POSP appointed by the Insurance company/Insurance Broker.
- POS Products can be sold by POS Persons, Individual Agents, Intermediaries & Insurers.

(b) Benefits of Investing in Postal Life Insurance Policy:

i. The insured can avail income tax exemption as provided under Sec. 88 of the Income Tax Act.
ii. Additional facilities offered under this policy are Assignment, Loan, Conversion, Surrender and Paid-Up Value options.
iii. The policy can be transferred to any Circle within India, at no additional charges.
iv. Passbook facility is available to track the payment of premium and in case of loan transactions, etc.
v. Premium can be paid on an annual, half-yearly and monthly basis. When the payment is due, the policyholder can make a payment on any working day.
vi. If paid an advance premium payment for a policy period of six months, then avail a discount on premium worth 1% of the value.

vii. If an advance premium payment for a policy period of 12 months, they can avail a discount on premium worth 2% of the value.
viii. Nomination facility is available.
ix. Since this scheme has a centralized accounting facility, claims process is quick and easy.
x. A policyholder can revive a lapsed policy.
xi. A duplicate policy document will be issued to the policyholder if he/she has lost the original document.
xii. This policy can be converted from a Whole Life Assurance policy to an Endowment Assurance Policy. An Endowment Assurance Policy can be converted to another Endowment Assurance plan as per the regulations and guidelines laid down by the insurer.

7. (a) Examine what perils are in the context of insurance and how they lead to risk. [7]

(b) Discuss the provisions relating to the Appointment of Actuary in the case of:

(i) Life Insurance

(ii) General Insurance [7]

Answer:

7. (a) Perils cause the deviation in events from those that we expect. They are the immediate cause of loss. Their very existence ensures that we are surrounded by risk for example flood, death, sickness, theft, terrorism etc. and these are discussed below:

Natural Perils: There are unexpected natural phenomena, which year in and year out caused untold misery, loss of life and property. Volcanic eruptions, fire due to lightning, landslides, cyclones, hurricanes, storms, floods, the vagaries of weather, unseasonal rainfall and prolonged dry spells, hailstorms are some other examples of natural risks that can cause losses. These perils are also called Act of God perils, and there is little that mankind can do to stop them, he can only learn to live with them and devise means to lessen the negative impact.The most recent example in the Indian context being the Gujarat Earthquake on Jan 26th 2001, which caused widespread devastation. Nearly 20,000 lives were lost, numerous villages and localities were razed to the ground and lakh were rendered homeless.

Man Made Perils: These are an outcome of our society and are the violent actions and unethical practices of people, which result in deviation from the expected.\

- Theft: Pages of your daily newspaper provides a fair idea about this rampant malady in our society. The entire page is full of incidents of thefts of motorcycles, daylight robberies and burglaries loss to human life by accident, terrorism, enmity, adulteration murder etc.
- Riots, Strikes and Malicious Damage: These are perils, which every property owner faces. During Riots miscreants' damage, Public and Private property, loot stores, inflict injury or death to innocent people and the police personnel and bring business to a standstill causing untold damage. Similarly strikes sometimes turn violent resulting in damage to life and property. Strikes also result in loss of production causing huge monetary losses, which may even result in bankruptcy.
- Accidents: Accidents are caused by people and they cause injury to themselves or to others and also damage to property. Automobile accidents alone contribute the maximum share of losses due to this peril. As per WHO study each year "Road Traffics" take the lives of 1.2 million men, women & children around the world and seriously injure millions more.

Economic Perils: Perils: The third category of Perils or cause of Risk is economic in nature and the examples of this type of Risk are Depression, Inflation, Local fluctuations and the instability of Industrial firms. Depression in the market leads to low production levels and an increase in unemployment. Low production results in reduced profits or losses for business houses whereas unemployment stops the income of individuals causing Managing Risk in Insurance Business mental and physical suffering. When Inflation is there in the economy the buying power of money declines and the real value of savings and income is reduced. People whose livelihood is based on fixed income such as pensioners (Retired persons) during such periods are the hardest hit and may find it impossible to make both ends meet. This fluctuation in the general economy can cause unfavourable deviation from the expectations and create risks for both Industries firms as well as individuals.

(b) To be appointed as an actuary with any insurance company, an individual has to fulfil the following criteria, as put forth under regulations.

- He/she should be a resident of India.
- Should be a fellow member as per the Actuaries Act, 2006.
- He should not be over the age of 65 years.
- He should possess a Certificate of Practice from the Institute of Actuaries in India.
- He has not committed any professional breach.

(i) In the case of life insurance:

- He/she should have passed a specialisation subject related to life insurance. Currently, specialisation refers to a Specialist Application subject as put forth by the Institute of Actuaries in India.
- A prospective candidate should have at least 3 years of post-fellowship experience pertaining to the annual statutory value of life insurers.
- A minimum of 10 years' experience in the life insurance industry, out of which, at least 5 years should be that of the post-fellowship experience.

(ii) In the case of General Insurance:

- He/she should have passed a specialisation subject related to general insurance. As per the Institute of Actuaries in India, currently, specialisation refers to a Specialist Application subject.
- He/she should have at least 1 year of post-fellowship experience pertaining to the annual statutory value of a general insurer.
- A minimum of 7 years' experience in the general insurance industry, out of which, at least 2 years should be that of the post-fellowship experience.

8.(a) As per RBI guidelines on ALM, Capital and Reserves are to be placed in over 5 Years' Bucket, Savings Bank and Current Deposits may be classified into volatile and core portions. Savings Bank (10%) and Current (15%). Deposits are generally withdrawable on demand. This portion may be treated as volatile. While the volatile portion can be placed in the time bucket for 14 days, the Core portion may be placed in over 1-3 Years bucket. The term deposits are to be plain ced respective maturity buckets.

Capital	**₹1,180 Crores.**
Reserves	**₹12,000 Crores.**
Current account	**₹1,000 Crores.**

Saving Bank	₹4,000 Crores.
Term deposits 1-month maturity bucket	₹400 Crores.
1 to less than 3 months maturity bucket	₹800 Crores.
3 months to less than 6 months maturity bucket	₹1,200 Crores
6 months to less than 12 maturity bucket	₹2,000 Crores.
1 year to less than 3 years maturity bucket	₹1,200 Crores.
3 years to less than 5 years maturity bucket	₹600 Crores. and
Above 5 years maturity bucket.	₹800 Crores.
Borrowing from RBI	₹400 Crores.

Based on the given information, answer the following questions:

i. Calculate the amount of current account deposit that can be placed in 14 days bucket?

ii. Calculate the amount of saving bank deposit that can be placed in 14 days bucket?

iii. Calculate the amount of current account deposit that can be placed in a 1-3 years bucket?

iv. Calculate the amount of saving bank deposit that can be placed in a 1-3 years bucket?

v. Calculate the total amount of term deposit that will be placed in various maturity buckets up to less than 12 months? [7]

(b) Rohit proposed to purchase Life Insurance Policy (Unit Linked) from ABC Insurance Co. Ltd. The company asked him to get his medical done for which expenses were borne by the proposed insurer. After receiving the medical reports, the insurer accepted the proposal, and consequently, the policy documents were issued. Policy documents contained some wrong information like the name of the insured, date of birth, and details of the riders attached to the property. Rohit got annoyed and decided to cancel the policy and claim the refund of the premium paid by him.

1. List the rules of Interpretation of a policy.

2. Calculate the refund amount considering the given information:

- Sum Insured: ₹100.00 lakh
- Premium Paid: ₹1,00,000.00
- Units allotted at the time of Policy Issuance: 8,000 @ ₹10.00 per unit
- Medical Expenses: ₹5,500
- The proportionate Risk premium for the cover period: ₹ 12,500
- Stamp Duty Charges: ₹800
- Fund Manager Charges: ₹ 1,200
- Unit Price as of the date of cancellation: ₹9.50 per unit. [7]

Answer:

8. (a)

i. Volatile portion of 15% to be placed in this bucket.

Hence = ₹1,000 Crores x 15% = ₹150 Crores.

ii. Volatile portion of 10% to be placed in this bucket.

Hence = ₹4,000 Crores x 10% = ₹400 Crores.

iii. Non-volatile portion of 90% to be placed in this bucket.

Hence = ₹1,000 Crores × 90% = ₹900 Crores.

iv. Non-volatile portion of 90% to be placed in this bucket.

Hence = ₹4,000 Crores × 90% = ₹3,600 Crores.

v. ₹400 Crores + ₹800 Crores + ₹1,200 Crores + ₹2,000 Crores

= ₹4,400 Crores.

(b) 1) The following rules of Interpretation of a policy are applied:

- Printed and written portion of the policy is to be construed together as far as possible.
- In case of contradiction, the written portion overrides the printed portion.
- The policy is to be interpreted as a whole.
- The words in the policy are to be given their plain, ordinary and popular meanings.
- Technical words are to be given their strict technical meaning.
- •The ordinary rules of grammar shall apply.

2) Refund Amount Calculation in the case of ULIP Policy where the insured disagrees with any of the terms or conditions, he has the option to return the policy stating the reasons for his objection, when he shall be entitled to a refund of the premium paid, subject only to a deduction of a proportionate risk premium for the period on the cover and the expenses incurred by the insurer on medical examination of the proposer and stamp duty charges. In respect of a unit-linked policy, in addition to the deductions under sub- regulation (2) of this regulation, the insurer shall also be entitled to repurchase the unit at the price of the units on the date of cancellation.

Premium Amount = Unit Value as on the date of Cancellation x Number of units

= 9.5 x 8,000 = ₹76,000

Less: Sum of Medical Expenses + Proportionate Risk Premium + Fund Manager charges and Stamp duty Charges = ₹5,500 + ₹12,500 + ₹800 + ₹1,200 = ₹20,000

Amount Refundable = ₹76,000 - ₹20,000 = ₹56,000