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School of Management and Business Studies
Department of Management **Roll No...**
Odd Semester Examination - January 2024
Integrated MBA-IX Semester
MBA(I)-GE-FM-03: Financial Risk Management

Duration: 3 Hour Max. Marks: 75

Note: Attempt any Five Questions, All questions carry equal marks. Students are allowed to use scientific calculators (15X5=75)

1. As a risk manager for a financial institution, analyze the impact of interest rate fluctuations on the organization's profitability. Propose risk mitigation strategies to navigate interest rate risk effectively.

2. Explain the role of operational risk in the financial sector. Identify common causes of operational failures, such as technology glitches, fraud, and human error. Discuss how financial institutions can implement effective controls and procedures to minimize operational risk.

3. (a) XYZ Corporation is contemplating two financing options for its upcoming expansion:
   - Option A: Raise $5,000,000 by issuing common stock.
   - Option B: Borrow $5,000,000 at an annual interest rate of 8%.

   Assuming the company can invest the funds at a 12% return, calculate the return on equity (ROE) for each option and provide an analysis of the financial leverage implications.

   (b) ABC Investments is considering two different portfolios for investment. Portfolio X has an expected annual return of 10%, while Portfolio Y has an expected annual return of 12%. The standard deviation of returns for Portfolio X is 8%, and for Portfolio Y, it is 15%.
   - Calculate the coefficient of variation for both Portfolio X and Portfolio Y.
   - Interpret the coefficient of variation values in the context of risk.

4. Distinguish between the money market and the capital market, and also provide examples of financial instruments traded in each market and discuss the respective roles they play in the overall financial System.

5. Consider an individual named Emily who is planning for her retirement. Design a stress test scenario for Emily's retirement savings, considering factors that could impact her investment portfolio and retirement income. Create a figure to visually represent the impact of the stress scenario on Emily's retirement savings over time.

6. (a) ABC Investment Bank is assessing the risk associated with its equity portfolio. The bank wants to calculate the one-day 95% VaR for its portfolio. The current value of the portfolio is $10 million. Historical data reveals that the daily returns of the portfolio are normally distributed with a standard deviation of 2%. [For a 95% confidence level, the Z-score is approximately 1.645.]

   (b) Outline the major differences between Basel I, Basel II, and Basel III and their respective impacts on risk management and financial stability.

7. XYZ Energy Corporation heavily relies on natural gas as a primary input for its power generation. The company is concerned about potential commodity price fluctuations in natural gas and wants to assess and manage its commodity risk exposure. As a risk analyst, outline a practical commodity risk analysis for XYZ Energy Corporation. Consider key steps, methodologies, and risk mitigation strategies specific to the natural gas market.

8. ABC Islamic Bank, operating in accordance with Sharia principles, is expanding its operations globally. As a risk management consultant, outline a comprehensive risk management strategy tailored to the unique features of Islamic banking. Address key risk categories, regulatory challenges, and ethical considerations. Provide specific examples of risk mitigation measures aligned with Sharia principles.