

MBS / Fourth Semester / FIN 689: Investment Management

Candidates are required to answer all the questions in their own words as far as practicable. Figures in brackets indicate full marks.

Group "A"

Case / Situational Analysis Questions

1. *Read the following situation prudently and answer the questions that follow:* [30]

After successfully completing an MBS with a specialization in finance, you have recently been appointed as a Portfolio Manager at Everest Capital, a newly established investment company in Nepal. The firm aims to position itself strongly in the Nepalese capital market by adopting scientifically grounded investment strategies. As part of your responsibilities, you are required to analyze the current performance and volatility of the NEPSE and design an optimal investment portfolio that balances risk and return in line with the company's objectives.

Given the dynamic nature of financial markets and the increasing importance of diversification, Everest Capital is particularly interested in applying modern portfolio theory to guide its investment decisions. You are expected to use the principles of Markowitz portfolio selection to evaluate available investment opportunities and construct an efficient portfolio. The company has collected a substantial amount of funds and seeks to allocate them prudently across different financial assets while considering both systematic and unsystematic risks.

For this purpose, three investment alternatives are available: a stock fund (A), a long-term government and corporate bond fund (B), and a T-bill money market fund that offers a risk-free return of 7%. The probability distribution of returns for the two risky funds is provided below:

Fund	Expected Return	Standard Deviation
Stock Fund (A)	22%	28%
Bond Fund (B)	12%	16%

The correlation coefficient between the returns of the two risky funds is 0.20.

- a) Based on Markowitz portfolio theory, explain how the optimal portfolio can be selected.
- b) Determine the proportions of investment in each risky fund for the minimum variance portfolio. Also calculate the expected return and standard deviation of this portfolio.
- c) Calculate the proportions of investment in each risky fund for the optimal risky portfolio. Also determine the expected return, standard deviation of this portfolio and reward to volatility ratio.
- d) If the company's degree of risk aversion is 4, determine the allocation of funds between the optimal risky portfolio and the risk-free asset (T-bill).
- e) Compare risk and return of optimal complete portfolio (from part 'd') with that of the optimal risky portfolio (from part 'c'). What conclusion can you draw? [4+8+8+6+4]

Group "B"

Problem Solving / Critical Analysis Questions

Attempt Any THREE questions: [3 × 15 = 45]

2. Explain the competitive forces framework used in industry analysis. How does each force affect industry attractiveness and firm profitability? Support your answer with relevant examples.
3. A newly issued bond has a maturity of 5 years and pays an 8% coupon rate (with coupon payments coming once annually). The bond sells at par value.
 - a. Compute the duration of the bond.
 - b. Find the actual price of the bond assuming that its yield to maturity immediately increases from 8% to 9% (with maturity still 5 years) and actual percentage change in bond price

- c. What percentage change in price would be predicted by the duration rule? What is the percentage error of that rule?
- d. What price would be predicted by the duration-with-convexity rule? Why percentage changes in bond price different based on duration and convexity?
4. Suppose the current expected return on the market is 14% and the risk free rate is 6%. The expected return and betas for three stocks are listed below:

Stocks	Expected return	Beta
X	18%	1.5
Y	20	2.0
Z	12	0.5

- a. Calculate required return on each stock.
- b. Which stock is undervalued? Which is overvalued? Which is worth investing?
- c. Draw a graph and locate stock X, Y and Z in SML graph.
- d. Calculate the risk premium for all stocks.
- e. Differentiate between systematic and unsystematic risk.
5. Kathmandu Stock Exchange (KEPSE) has been recently established. Only three stocks-A, B and C have been listed in the KEPSE. Consider the following other information.

Stock	Total shares outstanding	Market Price on		
		day 0	day 1	day 2
A	5,000	160	135	150
B	10,000	240	280	280
C	20,000	110	120	150

These three stocks issued no additional shares. Ignore cash dividend payments when computing this price weighted index.

- a. What will be the stock index on day 1 and day 2, if the three-stock index is (i) value-weighted, (ii) price-weighted, and (iii) equally weighted?

- b. At the end of day 2, B Company declared a 2-for-1 stock split. Price of stock A, B and C on day 3 are Rs 160, Rs 150 and Rs 170 respectively. Compute index for day 3 using price weighted index and value weighted index.
- c. Briefly discuss factors to be considered while constructing market index. Also highlight the usage of market index. [6+4+5]

Group "C"

Concept Based Short Answer Questions

Answer any FIVE questions:

[5 × 5 = 25]

6. Explain the various stages of business cycle.
7. Highlight the recent development in securities market in Nepal.
8. The market consensus is that Timber Corporation has a return on equity (ROE) of 10%, a beta of 1.20, and intends to maintain its traditional plowback ratio of 60% indefinitely. The company's earnings for the current year are Rs. 12 per share, and the annual dividend has just been paid. The expected market return for the coming year is 13%, and the current T-bill rate is 5%. Calculate:
- The intrinsic value of Timber Corporation's stock
 - The present value of growth opportunities (PVGO)
9. Describe the concept of behavioural finance.
10. The Anupama Closed-End Fund holds Rs. 750 million in securities and has liabilities of Rs 25 million. The fund has 55 million shares outstanding and is currently trading at a 12% discount from its net asset value (NAV).
- Calculate the net asset value (NAV) per share.
 - Determine the current market price per share.
 - State any two possible reasons why the fund may be trading at a discount to NAV.
11. Distinguish between the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT).



April 2026

MBS / Fourth Semester / MGT 523: Strategic Management

Candidates are required to answer all the questions in their own words as far as practicable. Figures in brackets indicate full marks.

Group "A"

Case / Situational Analysis Questions

1. *Read the following situation prudently and answer the questions that follow:* [30]

Himalayan Distillery Limited (HDL), established in 1985 AD, thrives in research to develop, manufacture, and market quality alcoholic beverages responsibly and competently through its continuous improvement and professionalism. The Company is a culmination of a perfectionist's dream – a dream to build a distillery that will stand out against the rest by offering a wide variety of best-in-class alcoholic products manufactured through hi-tech processes. The company's objectives are to attain efficiencies in production and, marketing through automation and consumer-focused business operations; comply with existing laws and continue to advocate for enhancing the business environment; ensure transparent operations and accountability, respect competition and stay ahead with fair marketing practices; and enhance employee satisfaction with continuous development opportunities, and Increase profitability and share value.

Himalayan Distillery Limited (HDL) boasts a significant advantage due to its advanced manufacturing and distillation facilities, which allow it to produce internationally recognized alcoholic beverages. Its distillation plant, designed by KATZEN (USA), has a capacity of 30 KLPD and can produce 6 million liters of Extra Neutral Alcohol (ENA). Additionally, HDL has recently invested in a cutting-edge Malt Distillation Plant to reduce reliance on expensive imports of Malt spirits. The company maintains rigorous quality control laboratories,

reflecting its steadfast commitment to quality and consistency across its product range. Despite challenges posed by the economic slowdown, HDL is on a recovery path and aims to exceed its previous production capacities. The market operations include a large network of distributors and wholesalers and off trade and on trade channels across Nepal. J.G.I Distribution Pvt. Ltd. (JGIDPL) does the sales and marketing, with a sales marketing team of about 200 people. The sales team is led by the General Manager of sales and marketing.

HDL has a code of conduct that applies to all staffs and suppliers. The code is intended to ensure a minimum standard of behavior of employees, with stakeholders, and with the market. It aims to ensure a uniform approach to behavior of all staff to safeguard and enhance company image, and to foster a sound professional working relationship within the company and a respectful and harassment – free (including sexual harassment) workplace. Non-compliance with the code is investigated and could invoke disciplinary actions.

Himalayan Distillery Limited (HDL), a landmark name in the alcoholic beverage industry of Nepal has prominently placed itself as the market leader with an astounding market share of approximately above 70% market share in the 40UP whisky segment. HDL has been able to stand strong in the ever-competitive liquor industry of Nepal. This can be attributed to a series of factors including but not limited to higher degree of compliance with and implementation of international standard quality benchmarks, uncompromised adherence to corporate governance, continuous product innovation and upgradation, state-of-the-art automation and better scalability of its manufacturing processes to further enhance its operational efficiency and productivity and not to forget a highly involved and customer-oriented, competitive and a robust sales and distribution team.

HDL's strategies focus on maintaining market leadership and expansion, premiumization and portfolio diversification, operational excellence and technology, sustainability-driven growth, robust distribution network, focus on innovation, and operational excellence. Even though, HDL is growth its business in sustainable manners, it is also facing many challenges and difficulties from internal and external forces. The management of the HDL needs to consider all the

components of strategic management for sustaining its business activities in Nepalese market for long duration of time period.

Questions:

- a) Assess the business environment of alcohol industry in Nepal.
- b) Explain the major business strategies that HDL has applied for maintaining competitive advantage in the market.
- c) As a management scholar what is your suggestion to the HDL management for implementation of strategic management components for further improvement in business.

Group "B"

Problem Solving / Critical Analysis Questions

Attempt Any THREE questions:

[3 × 15 = 45]

2. Strategic decision and actions are the important components of strategic management that would lead an organization to a new horizon. In light of this statement, mention the roles of chief executive officer in the strategic management.
3. Value chain analysis is a process of dividing activities of an organization in various groups and analyzing them to find out their contribution in creating value on products and services. Explain the application of value chain analysis in the organization focusing to above statement.
4. How do you analyze competitors, suppliers and buyers, as a responsible officer of a company? Analyze those task environment based on porter's five forces model.
5. How does resource-based view (RBV) support in generating alternative strategies? Analyze with examples.

Group "C"

Concept Based Short Answer Questions

Answer any FIVE questions:

[5 × 5 = 25]

6. What do you mean by strategic management? Explain the significance of strategic decision in today's business world.
7. Explain the red ocean strategy along with conditions of applying it in business.
8. Describe the reasons of unethical behaviour in the organization.
9. What do you mean by organizational resources? Explain the different types of organizational resources.
10. Explain the various methods of strategy development in the organization.
11. Explain the process of strategy implementation.



MBS / Fourth Semester / FIN 685: Financial Markets and Institutions

Candidates are required to answer all the questions in their own words as far as practicable. Figures in brackets indicate full marks.

Group "A"

Case / Situation / Extended Problem Analysis Questions

Attempt All Questions:

[30]

- Capital adequacy is a measure of the financial strength of a bank expressed as a ratio of its capital to its risk weighted assets. This ratio indicates a bank's ability to maintain adequate capital in the form of equity and subordinated debts to meet any unexpected losses. In this connection, Chapter 1 of the Unified directives has made provision about the capital adequacy requirement for commercial banks. Under this directive, commercial banks are required to maintain minimum common equity tier I ratio of 4.5%, minimum tier I capital ratio of 6% and minimum total capital ratio of 11% based on Basel III framework. In this connection, consider the following balance sheet (Rs in million) of a Hypothetical bank with the risk weights to parentheses.

Assets	Rs	Liabilities and equity	Rs
Cash and balance at NRB (0)	10,000	Paid up capital	12,000
Investment in government bonds (0)	20,000	General reserves	14,000
Balance at local banks (20)	18,000	Capital adjustment reserve	10,000
Money at call (20)	15,000	Undistributed profit	15,000
Shares & Bond investment (100)	15,000	Exchange fluctuation reserve	14,000

Loans & Advances (100)	150,000	Borrowings	20,000
Fixed assets (100)	15,000	Deposit accounts	160,000
Other assets (100)	12,000	Bills payable	10,000
Total	255,000	Total	255,000

Additional tier 1 includes perpetual debt instruments of Rs 5,000 million and perpetual non-convertible preference share capital of Rs 3,000 million. The bank has Rs 8,000 million general loan loss provisions, Rs 20,000 million of advance payment guarantees, and performance bond of Rs 15,000 million. The risk weights assigned to the advance payment guarantees and performance bonds are 100 percent and 50 percent respectively. It is noted that the total risk weighted exposure on operational risk is Rs 180,000 million and total risk weighted exposure on market risk is Rs 140,000 million.

- Calculate the common equity tier 1 capital, additional tier 1 capital, tier 1 capital, tier 2 capital, and total capital of the bank.
- Calculate the total risk weighted exposure for credit risk and total risk weighted exposure for the bank.
- Calculate common equity tier 1 ratio, Tier 1 ratio and total capital adequacy ratio for the bank. Does the bank have sufficient capital to meet the regulatory requirement?
- Examine the rationale behind maintaining a prescribed capital adequacy ratio by the bank.
- If a bank's capital adequacy ratio falls below the regulatory requirement, what corrective actions can it take?
- How would an increase in non-performing loans (NPLs) affect a bank's capital adequacy ratio? Explain.

[8+8+8+2+2+2]

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Group "B"

Problem Solving / Critical Analysis Questions

Attempt Any THREE questions:

[3 × 15 = 45]

- "A financial system provides the structure through which funds circulate in an economy, allowing savings to be mobilized and allocated to those in need of capital. In this context, describe the major components of Nepal's financial system, including financial institutions, financial markets, financial instruments, and regulatory bodies."
- A financial analyst is evaluating two bonds issued in the market. Bond A has a maturity of 15 years with a 10% annual coupon rate (paid semiannually), while Bond B has a maturity of 20 years with a 6% annual coupon rate (also paid semiannually). Both bonds have a face value of Rs. 1,000. The market conditions and required rates of return change over time, affecting their valuation.
 - If the required rate of return is 8% per annum, analyze and determine which bond will have a higher price and why? How do differences in coupon rate and maturity influence their prices?
 - Based on the 8% required return, identify whether each bond is selling at a discount, premium, or par value. Explain the relationship between coupon rate and required return in determining this classification.
 - Suppose the required rate of return increases to 10%, predict how the prices of both bonds will change. Which bond is more sensitive to interest rate changes? Provide reasoning based on maturity and coupon rate.
- You recently acquired some money from your parents. You do not need the money right now because you don't have any requirements. However, you will need the funds in the coming months to cover the costs of your higher education. So, you are considering putting your money into some money market instruments. One of your friends recently received his graduation in finance from Tribhuvan University.

You are confident that he will advise you to put your money into safe short term investment alternatives. As a result, you seek his advice. Your friend, on your request, informed you that the money market is the area of financial market where short-term financial products are traded through competitive and noncompetitive bidding. He also told you that money market consists of instruments such as Treasury bills, commercial papers, certificate of deposits, and so on. He went on to explain that it is used by a variety of parties, including firms to generate funds by selling commercial paper in the market, and the central bank on behalf of the government to raise short term public debt through Treasury securities. His basic idea for you is that money market is a safe place to invest due to the high liquidity of securities. In this line with your friend's advice, you are required to seek the answers of the following issues:

- The features and major participants of money market instruments.
 - You are considering buying a Rs 100,000 par value Treasury bill that currently sells at Rs 98,500 and is 91 days from maturity. Calculate the discount yield, investor return and effective annual return on the T-bill?
 - You are considering purchasing a 90 days certificates of deposits with a Rs 10,000,000 denomination from ABC commercial bank, bearing a 8% annual yield. How much in interest will the bank have to pay when this certificates of deposits matures? What amounts in total will the bank have to pay back to you at the end of 90 days?
- Central bank is responsible in fine tuning the money supply in the banking system by employing appropriate monetary tools. Three types of monetary tools used in the practice including the open market operations, discount rate and reserve requirements. Under open market operations, central bank uses four instruments including repurchase agreement, reverse repo, outright sale, and outright purchase. The required reserve ratio is a monetary policy tool that requires commercial banks to hold a percentage of deposits in reserve, which means they cannot lend out that partition of the deposit. Increasing the ratio lowers the amount of money that banks can lend, which lowers the total amount of money in entire banking system and vice versa. To

see an effect of change in required reserve ratio, let us assume a typical commercial bank reports existing transaction deposit of Rs 5,000,000 million on its balance sheet. The current required reserve ratio is 8 percent but the central bank is decreasing this requirement to 7 percent.

- Show the balance sheet of the central bank and commercial bank if commercial bank converts all excess reserves to loans, and all new loans will return into banks as transaction deposits.
- Show the balance sheet of the central bank and the commercial bank if the commercial bank converts all excess reserves to loans, but borrowers return only 65 percent of these funds to the commercial bank as transaction deposits.
- Show the balance sheet of the central bank and the commercial bank if commercial bank converts 80 percent of its excess reserves to loans and borrowers return only 70 percent of these funds the commercial bank as transaction deposits.

Group "C"

Concept Based Short Answer Questions

Answer any FIVE questions:

[5 × 5 = 25]

- Explain the major types of mutual funds based on investment objectives.
- Explain how pension fund is different from investment companies.
- Differentiate between investment banker, securities dealer and securities broker.
- How do you compute annual return for closed-end and open-end mutual fund? Illustrate.
- Suppose that the management of a life insurance company wants to set a competitive premium for a group of 10,000 potential policyholders, each 50 years of age and each requesting a Rs 100,000 life insurance policy. Mortality tables indicate that the proportion of 50-year-old individuals expected to die in their 50th year is seven of 1,000

policyholders. If this death-rate estimate is accurate for this group of 10,000 potential policyholders of the company. Assume that the company can earn an average of 8.5 percent on its portfolio of investments. The company has operating expenses (plus a target profit) on sales to these policyholders of Rs 170,000.

Calculate fair premium and gross premium.

- Consider the following salary data, recorded for Jamuna.

Total years of service, upon retirement = 30 years

Average salary, over entire employment = Rs 50,000

Annual salary, year by year, over last three years before retirement:

Year 28	Rs 51,000
Year 29	Rs 53,000
Year 30	Rs 55,000

- Suppose the pension plan uses a flat benefit formula, paying Rs 900 per year of service. Compute Jamuna's annual pension benefit.
- Suppose the pension plan uses a career average formula. The annual payout is 4 percent of career average salary, times the total years employed. Compute Jamuna's annual pension benefit.
- Suppose the pension plan uses a final pay formula. The annual payout is 3 percent of the average salary of the last four years, times the total years employed. Compute Jamuna's annual pension benefit.

