

BBA / Eight Semester / BNK 202: Financial Derivatives

Candidates are required to answer all the questions in their own words as far as practicable.

Group "A"

Brief Answer Questions: 6 ✓

[10 × 1 = 10]

Indicate whether the following statements are true or false. Support your answer with reason.

1. Financial derivatives are purely speculative, and highly leveraged instruments.
2. If you buy a put option while holding the underlying stock, your maximum gain equals the stock purchase price minus the put premium minus the option striking price.
3. Investors who do not consider risk in their decisions are said to be short selling.
4. Selling a call option is a bearish strategy that has limited gain and unlimited loss.
5. There is inverse relation between interest rate and value of call.
6. An option has an exercise price of Rs 25, the company declares a two for one stock split. Adjusted stock price would be Rs 50.
7. Put delta are negative, indicating the facts that the put option price and the underlying stock price are inversely related.
8. In case of certainty, future price is simply the sum of spot price and cost of carry. ✓
9. Swaps are custom-tailored to the need of the counterparties and often sold in organized exchange. ✓
10. In a currency swap, the notional principals are generally exchanged at the beginning and end of swap period. ✓

Group "B"

[6 × 5 = 30]

Short Answer Questions:

11. Discuss the current issues of derivative market in Nepal. ④ 4 ✓
12. Consider the following option prices

Options	Call	Put
Strike price	100	100
Stock price	120	105
Option price	26	3.5

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Risk-free interest rate is 6 percent per annum. Options expire in 90 days.

- a. Which option is in-the-money and which is out-of-the-money?
- b. Find the intrinsic value of options.
- c. Find the time value of both options.
- d. Assuming options are European, find the lower bound of both options.

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13. The stock price of Surya Hydro Company is Rs 140. A call option on this stock has exercise price of Rs 125 and selling for Rs 20. Another call option on this stock has Rs 130 exercise price and selling for Rs 12. Both calls are American and expire after 6 months. Examine whether they confirm the rules regarding American calls that differ only by exercise price. Also, suggest arbitrage strategy, if any.
- 5 //
14. The stock of NMB bank sells for Rs 500 per share. There exists options on NMB stocks, which permit the holder to buy one share at an exercise price of Rs 400. These options will expire after one year at which time stock will be selling either at Rs 800 or at Rs 200. Assume the risk-free rate is 5 percent per annum. *ouphic bhaco ch.*
- 5 //
15. Kathmandu Laboratories, Inc., is a new high-technology company whose common stock sells for Rs 230 per share. A call option exists on this stock with 3 months to expiration. It has an exercise price of Rs 215. You have made a careful study of the stock's volatility and conclude that a standard deviation of 0.50 is appropriate for the next 3 months. Currently, the risk-free interest rate is 6 percent per annum. Using the Black-Scholes-Merton option-pricing model, what is the fair price of European call on this stock?
- 3 //
16. Currently the price of Chandragiri Hills stock is Rs 2,500. You want to invest on this stock but you are not sure that whether the price of stock will increase or it will decrease in 6 months. Therefore, you want to make protective put. The put options with Rs 2,500 exercise price on Chandragiri stock are currently selling for Rs 500.

- a. Find the value of call option.
- b. Show that how could you earn arbitrage profit if market price of call is Rs 220.
- 6 //
- a. How can you make protective put?
- b. What is the cost of protective put to you?
- c. At what stock price in 6 month will you breakeven?
- d. Calculate the gain/loss from protective put in 6 months if stock price of Chandragiri at that time turned to be Rs 1,000, Rs 1,500, Rs 2,000, Rs 2,500, Rs 3,000, Rs 3,500, Rs 4,000, or Rs 4,500 respectively and graph the results.

Group "C"

Comprehensive answer questions:

[2 × 10 = 20]

17. A pension fund wants to enter into a six-month equity swap with a notional principal of Rs 60 million. Payments will occur in 90 and 180 days. The swap will allow the fund to receive the return on index 1, currently at 5514.67. The fund is considering three different types of swaps, one of which would require it to pay a fixed rate, another that would require it to pay floating rate, and another that would require it to pay the return on index 2, which is currently at 1212.98. Refer to these as swap 1, 2, and 3. The term structure is as follows:

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Term	Rate	Discount bond price
90 days	9%	$B_{0(90)} = 1/(1+0.09(90/360)) = 0.9780$
180 days	10%	$B_{0(180)} = 1/(1+0.10(180/360)) = 0.9524$

- a. Find the fixed rate for swap 1.
- b. Find the payments on day 90 for swaps 1, 2 and 3. Assume that on day 90 stock index 1 is at 5609.81 and stock index 2 is at 1231.94. Be sure to indicate the net payment.
- c. Assume it is 30 days into the life of swap. Stock index 1 is at 5499.62 and stock index 2 is at 1201.45. The new term structure is as follow:

Term	Rate	Discount bond price
60 days	6.80%	$B_{30(60)} = 1/(1+0.068(60/360)) = 0.9888$
150 days	7.05%	$B_{30(150)} = 1/(1+0.0705(150/360)) = 0.9715$

Find the value of swap 1, 2 and 3. 100 %

18. A forward contract on silver has one year to expiration. The spot price of silver today is Rs 1,500 per Tola. It requires annual storage cost of Rs 50 per Tola payable in two installments after each six months. Interest rate is currently 8 percent per annum. One contract on silver covers 100 Tola.

a. Find the forward price of silver today. ✓

b. Show arbitrage strategy if market price of forward contract is Rs 1,625.

c. What is the initial value of forward contract?

d. Assume it is 3 months after the contract was entered into. The spot price of silver now is Rs 1,350 per Tola and risk-free rate now is 8 percent per annum. What are the forward price and value of short forward contract now? ✓



BBA / Eighth Semester / BNK 205: Banking Law and Regulations

Candidates are required to give their answers in their own words as far as practicable.

Group "A"

Brief answer questions:

[10 × 1 = 10]

Indicate whether the following statements are 'True' or 'False'. Support your answer with reason.

1. The minimum loan loss provision of loan classification of watch list is 8%.
2. Bank only can provide the 50 % of collateral value as loan.
3. Nonperforming assets will generate the income for the banks.
4. Good collateral increases the risk to the banks.
5. Low and medium risk customers KYC forms are updated semiannually whereas the high risk customers are updated annually.
6. Demand deposits represent the largest deposit source of fund for commercial banks.
7. Collection of money for the customers is the core services of bank.
8. Maintaining a diversified loan portfolio helps a bank reduce systematic credit risk.
9. Loans may be granted only for short period by bank.
10. Nepal Rastra Bank (NRB) elect the board of director on behalf of bank.

Group "B"

[6 × 5 = 30]

Short Answer Questions:

11. What do you mean by credit? Explain the process of granting credit. ✓
12. What is letter of credit and also explain its major components? ✓
13. Describe the roles and responsibilities of board of director of the bank. ✓
14. What do you mean by security in loan agreement? What are the key features of security? ✓
15. What are the legal challenges in banking business? Explain banking fraud, cyber-crime. ✓
16. Explain the procedure of account opening and account closing. ✓

Group "C"

[20]

Comprehensive Answer Questions:

17. Read the following case carefully and answer the questions:

Paila is a well known shoe manufacturing company located in Kathmandu. Currently 400 employees are engaged in this company. It imports raw material from Pakistan. It has 10 foreign technicians from different countries. These technicians take salaries in their home currencies: dollar, yen, and pound and Indian rupees. It has imported modern machine form New Zealand which is used in making shoes. Its long-term capital is Rs 1,000 million which comprises Rs 400 million of equity and Rs 600 million of loans from bank. All employees receive their salary from bank. Most of the products are exported. Its

major markets are Japan, India and America. However, about 20 percent of the shoes produced by the company are sold in major cities in the country. Company has central billing system, that is, it has no regional offices to collect the cash from customers.

Questions:

- 3 a. What types of payment problems and financing problems would this company have to bear if there were no banking system?
- 3 b. Do you think that company would have to face problem in export and import if there were no banking system? How does a bank help to manage this problem?
- 4 c. Why banking system is needed for the development of economy? Explain.
- 4 d. Explain the importance of banking law and regulations.



April 2021

BBA / Eighth Semester / BNK 207: Treasury Management

Candidates are required to give their answers in their own words as far as practicable.

47 47 Group "A"

47 is expected to come.
[10 × 1 = 10]

Brief answer questions:

Indicate whether the following statements are 'True' or 'False'. Support your answer with reason.

1. Correspondent banking provides only credit services to banks and financial institutions. ✓
2. A revolving deposit is a non-interest bearing demand deposit. ✓
3. Front office determines the exchange rate and interest rate for money and capital market securities. ✓
4. In call deposit interest rates are generally dependent on the negotiation between the client and the bank. ✓
5. Consumer loan are made to fulfill the personal financial obligations of an individual. ✓
6. Maintaining a diversified loan portfolio helps a bank reduce systematic liquidity risk. ✓
7. Relationship pricing promotes greater customer loyalty. ✓
8. A bank with a positive duration gap would experience an increase in the market value of equity with rising interest rates. ✓
9. In open market operation, available loanable funds increase with respect to increase interest rate. ✓
10. Funding gap is the ratio between variable rate assets and variable rate liabilities. ✓

Group "B"

23

Short Answer Questions:

[6 × 5 = 30]

11. What do you mean by Treasury Management? Explain the scope of Treasury Management. ✓ (5)
12. What are the major sources of short-term and long-term borrowing for the banks? Explain. ✓ (5)
13. What is interbank lending? Describe the reserve requirement provision of central bank. Explain. ✓ (3)
14. Define loan pricing. Describe the methods of loan pricing strategy of Nepalese commercial bank. ✓ (2)
15. Describe the asset liability management and also high light the major roles and responsibility of ALCO. ✓ (5)
16. Commercial bank is leading financial institutions in Nepal though it has so many challenges. In this context, explain the opportunities and challenges of treasury management in Nepalese banking sector. ✓ (3)

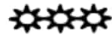
16

Group "C" 16

[2 × 10 = 20]

Comprehensive Answer Questions:

- 8 17. Define investment portfolio. Discuss about the investment instruments are available for the Nepalese commercial banks in Nepal. ✓
- 8 18. Explain the functions, duties, and responsibilities of Foreign Exchange Dealers Association of Nepal (FEDAN). ✓



BBA / Eighth Semester / MGT 208: Business Strategy

Candidates are required to give their answers in their own words as far as practicable.

Brief Answer Questions:

8 ✓

Group "A"

36 expected

[10 × 1 = 10]

1. Mention any two importance of strategic decisions.
2. State the types of corporate level strategies.
3. Write down a mission statement for a private education institution catering the needs of high school (10+2) students.
4. List out the situations that the bargaining power of buyers considered higher as given by Porter's five forces framework.
5. What is the main aim of knowledge management?
6. Define the term 'strategic groups'.
7. Provide the examples of related and unrelated diversification possible for a travel agency business.
8. Define strategic leadership.
9. How can one say that a resource is unique one?
10. Write down any two uses of SWOT analysis in strategic management process.

Group "B"

Short answer questions:

16 ✓

[6 × 5 = 30]

11. "Strategic management's ultimate focus is to develop competitive edge". Explain in brief.
12. Write about value-chain analysis framework as forwarded by Michael Porter.
13. State and explain the steps for strategy development.
14. What is cost leadership strategy? What are the conditions suitable to apply this strategy?
15. Define retrenchment strategy and explain in brief its different types.
16. Explain your understanding about business strategy and leadership in Nepalese corporate organizations'.

Group "C"

Comprehensive answer questions:

12

[4 × 5 = 20]

17. Read the following case carefully and answer the questions:

Mc Donald's corporation is an American fast food company, founded in 1940s. It serves estimated 69 million customers daily in more than 100 countries (2018). It is best known for its hamburgers, cheeseburgers, breakfast items, soft drinks, milk-shakes, wraps and desserts. In response to changing consumer tastes and the demand of health conscious customers, the company has added to its menu salad, fish, smoothies and fruit. Its

revenue generates from the rent, royalties, and fees paid by the franchises, as well as sales in company operated restaurants. As of 2020, it has the ninth highest global brand valuation and in the year 2018 Mc Donald reported earnings of US \$ 5.9 billion with annual turnover of US\$ 21 billion a decrease of 7.9% over the previous year.

The unique business relationship among the company, its franchises and suppliers (collectively referred as system) has been key to the success of the company. Its overall strategic plan is called PLAN TO WIN and for that company concentrates not to become biggest fast food restaurant chain, rather to be the best one. It has been able to retain its position through the innovative initiatives taken in five factors: People, Products, Place, Price and Promotion. Mc Donald's strategic plan continues to focus on breakfast, chicken beverages and convenience.

As per the organizational strategies it has pursued: better restaurant operations, placing the customer first, menu variety and beverage choice, convenience and day-part expansion, and ongoing restaurant investment. Marketing mix that Mc Donald's use to achieve its marketing goals are longer operating hours, everyday value meals, and optimising efficiency in the drive-thru sector.

However, the market survey of fast food segment has revealed that there seems to be an increasing trend in fast casual dining which has affected sales for Mc Donald's. Customers are now willing to spend extra for the traditional fast serving but with a better and classy ambience. The data show the 15% to 20% growth in this area as compared to only 2% growth in fast food chains.

Mc Donald's is also experiencing a stiff competition among the hamburger eateries such as Wendy's and Burger king. These major competitors are catching up fast by recognizing the importance of drive-thru customers rising trend in United States.

Similarly, healthy conscious segment is also becoming picky in going for Mc Donalds.

As stated earlier Mc Donald's sales has declined and hence root cause need to be identified thereby formulating new strategies for a new and innovative products.

Questions:

- a. Enumerate the competitive strategies followed Mc Donald's as given in the case.
- b. What are the new trends observed in fast food segment in USA?
- c. What could be the reasons for decline in annual revenue despite the good indicators for the company?
- d. Suggest the suitable strategies the company need to activate in order to maintain a stable growth in future.

