

# United College

## Kumaripati, Lalitpur PRE-UNIVERSITY EXAM – 2080

Level: BBS (IV<sup>th</sup> Semester) F.M.: 100 Time: 3 hrs. P.M.: 50

**Course Title:** Financial Management Date: 2080/11/24

Candidates are required to give the answer in their own words as far as practicable. The figures in the margin indicate full marks.

#### Group A

# **Brief Answer Questions:**

 $[10 \times 2 = 20]$ 

## **Attempt ALL Questions**

- 1. Define financial management.
- 2. What is the financial forecasting?
- 3. What is internal rate of return?
- 4. Point out the factors that affect capital structure.
- 5. What do you mean by agency problem?
- 6. What is Business risk?
- 7. A project that provides annual cash flow of Rs.1200 for nine years and cost Rs.6000 today. Is this a good project, if the required return is 8 percent?
- 8. If sales are expected to increase from Rs.5,000 to Rs.7,000, find the addition to retained earnings assuming the firm pays 40% of its earnings as dividend and after tax margin is 5%.
- 9. A firm within 40% tax bracket is considering the following two alternative capital structures.

_	Structure 1	Structure 2
Common stock (Rs.100) each	Rs.200,000	Rs.100,000
12% Debt	Rs.100,000	Rs.200,000

10. A stock has an expected return of 10 percent, its beta is 0.70, and the risk free rate is 5.5 percent. What must be the expected return on the market?

## Group B

# **Short Answer Question Attempt any SIX Questions:**

 $[6 \times 5 = 30]$ 

- 11. Define financial management. Explain the decisions of financial management.
- 12. What are the basic elements of strategic plan? Explain.
- 13. Surya Gas Limited sales are expected to increase from Rs.3 million in 2065 to Rs.6 million in 2066. Total assets of the firm are Rs.4 million at the end of 2065. The firm was operating at full capacity so that its assets must grow spontaneously with sales. At the end of 2065, the firm has Rs.750,000 in current liabilities including notes payable of Rs.150,000. The after tax profit margin is estimated to be 12 percent and the firm pays 30 percent of its earning as dividend.
  - (a) What is the firm's additional fund needed for 2065?
  - (b) If the firm pays no dividend in 2066, what will be additional funds needed?
- 14. You are given the following information:

Security	Beta
A	1.4
В	1.20
С	0.90
D	0.80

The risk rate is 8% and market return is 15%

- (a) Draw SML
- (b) What is the expected return of A, B, C and D?
- (c) Locate the beta of each security on SML

15. Consider two stock A and B with their expected return and standard deviation as follows:

	Stock A	Stock B
Expected returns	15%	10%
Standard deviation	10	8

- (a) What is the expected return if the portfolio contains equal amount of each security?
- (b) What is the standard deviation for the equally weighted portfolio, if the correlation between the security returns is +1?
- 16. Piyush Mineral Company is planning to bottle mineral water. A bottle will sell for Rs.225 with variable cost of Rs.8. The company's fixed cost will Rs.175,000 including depreciation of Rs.25,000. What is breakeven point in bottles and in Rs. for the company?
  - (a) What sales volume the firm must achieve to earn an after tax profit of Rs.15,000?
  - (b) What happens to break-even point if fixed cost except depreciation increased by 20%.
- 17. ABC Company has Rs.5 million in sales and Rs.1.7 million in fixed assets. Currently the company's fixed assets are operating at 90 percent of capacity.
  - (a) What is the company's full capacity sale?
  - (b) What is the company's target fixed asset to sales ratio?

## Group C

# Long Answer Questions

**Attempt any THREE questions:** 

 $[3 \times 10 = 30]$ 

- 18. Define financial Management. Discuss major responsibilities of a financial manager.
- 19. Consider the following scenario analysis:

Scenario	Probability	Rate of return	
		Stock A	Stock B
Recession	0.30	10%	45%
Normal economy	0.40	20	25
Boom	0.30	30	5

- (a) Calculate the expected rate of return for each stock
- (b) Calculate the standard deviation for each stock.
- (c) Calculate portfolio return and standard deviation if equal amount of money is invested in each stock.
- (d) Would you prefer to hold Stock A and Stock B or Portfolio? Why?
- 20. You have developed the following analytical income statement for you corporation. It represents the most recent year's operations, which ended yesterday.

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Sales	Rs.200,00,000
Variable cost	Rs.120,00,000
Revenue before fixed cost	Rs.80,00,000
Fixed cost	Rs.50,00,000
EBIT	Rs.30,00,000
Interest expenses	Rs.10,00,000
EBT	Rs.20,00,000
Taxes (50%)	Rs.10,00,000
Net income	Rs.10,00,000

Your supervisor in the controller's office has just handed you a memorandum that asking for written responses to the following questions:

- (a) At what level of output, what is the DOL?
- (b) What is the DFL?

- (c) What is Degree of Total leverage?
- (d) What is the firm's BEP in sales rupees?
- (e) If sales should increase by 20 percent, by what percent would earnings before taxes (and net income) increase?
- 21. You have recently joined Agro-Nepal Ltd as a financial executive. The Chief Financial Officer (CFO) of the company included you in the team responsible for the evaluating investment projects. Currently, the company is evaluating two Agro-processing equipment's. Since both equipment's will be used in the same line of business the team has decided that the required rate of return on both equipment should be 12%. The expected cash flows for each equipment are as follows:

	Equipment A	Equipment B
Initial Outlay	-Rs.110,000	-Rs.110,000
Year 1	Rs.20,000	Rs.40,000
Year 2	Rs.30,000	Rs.40,000
Year 3	Rs.40,000	Rs.40,000
Year 4	Rs.50,000	Rs.40,000
Year 5	Rs.70,000	Rs.40,000

In evaluating the equipment, please respond to the following questions raised by the chief Financial Officer.

- (a) What is the payback period on each of this equipment's? If Agro-Nepal impose a 3 year maximum acceptance payback period, which of these equipment's should be accepted? What are the criticisms of payback period?
- (b) Determine the net present value for the both equipment's. Based on NPV, do you recommend that the company select both equipment's? Why or why not?
- (c) Determine the internal rate of return for both equipment's. Should they accept? Why or Why not?

## Group D

## **Comprehensive Answer Question:**

[12+8=20]

22. Central State Inc. (CSI) Supplies you following balance sheet and income statement of 2021.

Balance Sheet as on Dec.2021 (in million Rs.)

Assets	Amounts	Liabilities	Amounts
Cash	7	Accounts payable	3
Receivable	13	Accruals	5
Inventories	20	Notes payable	2
Total current	40	Total current	10
assets		liabilities	
Net fixed assets	40	Long term debt	20
		Common stock	44
		Retained earnings	6
Total assets	80	Total liabilities &	80
		equity	

Income statement as for the year ended Dec. 2021 (in million Rs.)

Sales	35
Operating costs	30
EBIT	5
Interest	1.5
EBT	3.5
Tax@50%	1.75
Net income	1.75
Dividend	0.70
Addition to retained earnings	1.05

- (a) The firm is operated at full capacity in 2021 with regards to all items except fixed assets. Fixed assets were in 2021 were being utilized to only 70% of capacity.
  - (i) What is full capacity?
  - (ii) By what percentage could 2022 sales increase over 2021 sales without the need for an increase in fixed assets?
- (b) Now, supposed sales in 2022 increase by 30% over sales in 2021. How much additional fund (AFN) will be required? Use Pro-forma financial statement to determine AFN.

## ALL THE BEST



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## Kumaripati, Lalitpur PRE-UNIVERSITY EXAM – 2080

Level: BBS (IV<sup>th</sup> Year) F.M.: 100 Time: 3 hrs. P.M.: 40

**Course Title:** Corporate Finance (SET A) Date: 2081/01/09

Candidates are required to give the answer in their own words as far as practicable. The figures in the margin indicate full marks.

#### Group A

#### **Brief Answer Questions:**

(2x10=20)

Attempt all questions.

- 1. Define corporate social ethics with examples.
- 2. What do you mean by agency problem? List out the parties involved in the agency problem.
- 3. What are three different ways capital is transferred between savers and borrowers?
- 4. What is a yield curve?
- 5. Differentiate between primary and OTC markets.
- 6. Why does a firm include call provisions in bond issues?
- 7. Preferred stock called hybrid security, Why?
- 8. What will be the annual installment for the loan of Rs 500,000 if the interest rate is 10% and the loan period is 3 years?
- 9. The Company needs to raise Rs 20 million to finance its expansion into new markets. The company will sell new shares of equity via a general cash offering to raise the needed funds. The offer is Rs 90 per share and the company's underwriters change a 5% spread. How many shares need to be sold?
- 10. What do you mean by non- fund based source?

## Group B

## Descriptive answer questions:

5X10=50

Attempt any five questions.

11. What do you mean by good governance? Describe the output of good governance in the context of Nepal.

- 12. XYZ company can lease equipment for five years, making annual payments of Rs 40000 per year at the end of each year or they can buy the equipment for Rs 12500. At the end of 5 years, the equipment will have no salvage value. The firm's cost of capital is 12 and before tax cost of debt is 10 percent. The company uses straight-line deprecation and has a 40 percent rate.
- i. Should the machine be leased or purchased?
- ii. The appropriate discount rate for cash flows used in the analysis is the firm's after-tax cost of debt. Why?
  - 13. i) Assume that interest rate parity holds and that 90 days of risk-free securities yield 8 % in China and 7.5% in Britain. In the sports market, 1 pound equals Chinese yuan 10.5.
    - a) What is the 90-day forward rate according to interest rate parity?
    - b) Is the 90-day forward rate trading at a premium or discount? interpret your result.
- ii) ABC company needs to raise 10 million funds by issuing 12 percent preferred stock at a par value of Rs 100. The investor-required rate of return is 15 percent and charge 5 percent flotation cost on the total amount.
  - a) What is the selling price of preferred stock?
  - b) How many stocks should be issued?
  - 14. Firms A and B are identical except for their leverage ratios and the interest rates they pay on debt. Each has Rs 20 million in assets, has Rs 4 million of EBIT, and is in the 40% tax bracket. Firm A has a debt ratio of 50% and pays 12% interest on its debt, whereas B has a 30% debt ratio and pays only 10% interest on its debt.
    - a) Calculate the rate of return on equity (ROE) for each firm.
    - b) Observing that A has a higher ROE, B's treasurer is thinking of raising the debt ratio from 30% to 60% even though that would increase B's interest rate on all debt to 15% calculate the new ROE for B.
  - 15. Himalaya Herbal Company's 2012 financial statements are shown below:

Balance Sheet as of December 31, 2012 (Thousands of Rupees)

Dulunce Sheet	Butunee Sheet us of December 21, 2012 (Thousands of Rupees)			
Cash	Rs 1800	Accounts payable	Rs 7,200	
Receivables	10,800	Notes payable	3,472	
Inventory	12,600	Accruals	2,520	
Total current assets	Rs 25,200	Total current liabilities	Rs 13,192	
Net fixed assets	21,600	Mortgage bonds	5,000	
		Common stock	,	

		Retained	earnings		2,000 26,608
Total assets	Rs 46,800	Total li equity	iabilities	and	Rs 46,800

Income Statement for year ended December 31, 2012 (Thousands of Rupees)

income statement for year ended beet	ember 31, 2012 (1 mouse
Sales	Rs 36,000
Operating costs	30,783
Earnings before interest and taxes Interest	Rs 5,217 1,017
Earnings before taxes Taxes (40%) Net income Addition to retained earning Dividends (60%)	Rs 4,200 1,680 Rs 2,520 Rs 1512
	Rs 1008

- Assume that the company was operating in 2012 about all items except fixed assets; fixed assets in 2012 were being utilized at only 75 percent of capacity. By what percentage could 2013 sales increase over 2012 sales without the need for an increase in fixed assets?
- b) Now suppose 2013 sales increase by 25 percent over 2012 sales. How much additional external capital will be required? Assume that the company cannot sell any fixed assets and any required financing is borrowed as notes payable.
- 16. i) National finance company financial information as below:

Authorized shares: 4000000

Issued share: 80000

Par value: Rs 10 per share

Issued price: Rs 10 per share for 30000 shares and Rs 25 for 10000

shares

Paid in capital: Rs 150000 Retained earnings: Rs 160000

Treasury stocks: 10000 shares for Rs 10. Prepare shareholders' equity

account in the balance sheet.

ii) What do you mean by merger? Explain different types of mergers.

#### Group C

#### Analytical answer questions:

2X15=30

Attempt any two questions.

- 17. Sunlight Sailboats estimates that due to the seasonal nature of its business, it will require an additional Rs 2000000 of cases for the month of July. Sunlight has three options available to provide the needed funds.
  - i. Establish a one-year line of credit for Rs 2000000 with a commercial bank. The commitment fee will be 0.5 percent and the interest charge on the used funds will be 15 percent per annum. The minimum time the funds can be used is 30 days.
  - ii. Forego the July trade discount of 2/10, net 40 on Rs 2000000 of accounts payable.
  - iii. Issue Rs 2000000 of 60-day commercial paper at a 14 percent per annum interest rate. Since the funds are required for only 30 days, the excess funds (Rs 2000000) can be invested in 12 percent per annum marketable securities for the month of August. The total transaction fee on purchasing and selling the marketable securities is 0.5 percent of the fair value.
- a. Which financial arrangement results in the lowest rupees' costs?
- b. Is the source with the lowest expected cost necessarily the source to select? Why or why not?
- 18. The stock of the National Corporation is selling for Rs 50 per share. The company then issues rights to subscribe to one new share at Rs 40 for each five rights held.
- a. What is the theoretical value of a right when the stock is selling right—on?
- b. What is the theoretical value of one share of stock when it goes ex-right?
- e. What is the theoretical value of a right when the stock is selling ex-rights at Rs 50?
- d. Shiva Khanal has Rs 1000 at the time National stock goes ex-right at Rs 50 per share. He feels that the price of the stock will rise to Rs 60 by the time the rights expire. Compute his rate of return on his Rs 1000 if he (1) buys National stock at Rs 50 or (2) buys the rights at the price computed in part c, assuming his price expectations are valid.
- e. Do you think investment in rights is riskier than the in investment in stock of the same company? Justify.
- 19. What do you mean by financial market? Explain different components of financial markets by focusing Nepal stock exchange.

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## Kumaripati, Lalitpur PRE-UNIVERSITY EXAM – 2080

Level: BBS (IV<sup>th</sup> Year) F.M.: 100 Time: 3 hrs. P.M.: 40

**Course Title:** Corporate Finance (SET B) Date: 2081/01/09

Candidates are required to give the answer in their own words as far as practicable. The figures in the margin indicate full marks.

#### Group A

#### **Brief Answer Questions:**

(2x10=20)

Attempt all questions.

- 1. Who is the credit manager in a financial institution?
- 2. Define business ethics.
- 3. What is financial risk? Explain with the equation.
- 4. Define the bid price.
- 5. How can you calculate the value of right?
- 6. Define mortgage bonds.
- 7. Explain three characters of cumulative preferred stock.
- 8. Who is underwriter?
- 9. What is depository and non-depository institutions?
- 10. Define continuous market.

## Group B

## **Descriptive answer questions:**

5X10=50

Attempt any five questions.

- 11. What is corporate responsibility? Explain the major responsibilities of the financial manager.
- 12. XYZ company can lease equipment for five years, making annual payments of Rs 40000 per year at the end of each year or they can buy the equipment for Rs 12500. At the end of 5 years, the equipment will have no salvage value. The firm's cost of capital is

12 and before tax cost of debt is 10 percent. The company uses straight-line deprecation and has a 40 percent rate.

- i. Should the machine be leased or purchased?
- ii. The appropriate discount rate for cash flows used in the analysis is the firm's after-tax cost of debt. Why?
- 13. i) Assume that interest rate parity holds and that 180 days of risk-free securities yield 7 % in China and 7.5% in Britain. In the sports market, 1 pound equals Chinese yuan 10.5.
- a. What is the 180-day forward rate according to interest rate parity?
- b. Is the 180-day forward rate trading at a premium or discount? Interpret your result.
  - ii) ABC company needs to raise 10 million funds by issuing 12 percent preferred stock at a par value of Rs 100. The investor-required rate of return is 15 percent and charges 5 percent flotation cost on the total amount.
- a. What is the selling price of preferred stock?
- b. How many stocks should be issued?
- 14. ABC company has two financial plan

Financial plan	1	2
Equity share of Rs 100 each	Rs200000	Rs 300000
12% preference share	150000	10000
8% debenture		100000
Total capital	500000	500000

Tax rate 25%, variable cost 60% of sales and fixed cost is Rs 1500000. Find out DOL, DFL, DTL and EPS in two financial plan if total sales is Rs 1 million.

15. i) National finance company financial information as below:

Authorized shares: 1000000

Issued share: 40000

Par value: Rs 10 per share

Issued price: Rs 10 per share for 30000 shares and Rs 25 for 10000

shares

Paid in capital: Rs 150000 Retained earnings: Rs 160000

Treasury stocks: 10000 shares for Rs 10. Prepare the shareholder's

equity account in the balance sheet.

ii) What do you mean by merger? Explain different types of merger.

- 16. ABC company current price of stock is Rs 1200 and Mr thapa Purchase put option with an exercise price of Rs 1200 for a premium of Rs 100 per share.
  - a. What is the gain or loss at price of Rs 1000 or Rs 1200 in rupee and percentage?
  - b. What is the difference between put and call option?
  - c. How to reduce risk by using option?

## Group C

## **Analytical answer questions:**

2X15=30

Attempt any two questions.

17. ABC companies for 2013 financial statement has given below;

Balance sheet as of December 31, 2013(in million)

Assets	Amt.	Liabilities and equities	Amt.
Cash Account receivable Inventory Net fixed assets	7 13 20 40	Account payable Notes payable Accruals Mortgage bond Common stock	3 5 2 20 44
		Retained earnings	6
Total assets	80	Total liability and equity	80

Income statement for December 31, 2013

medific statement for December 31, 2013			
Sales	35		
Less: operating cost	30		
Earnings before interest and tax	5		
Less: interest	1.5		
Earnings before tax	3.5		
Less: taxes 50%	1.75		
Net income	1.75		
Dividends (40%)	0.7		
Retained earnings	1.05		

#### **Additional information:**

- a. The company was operating full capacity in 2013 with regard to all items except fixed assets. fixed assets in 2013 were being utilized to only 70% of capacity. By what percentage could 2013 sales increase over 2013 sales without need for increase in fixed assets?
- b. What is additional fund needed for 2014 if sales increase by 90% in 2014. In 2013 fixed assets capacity used 100%. Prepare pro forma income statement for addition to retained earnings.
- 18. i) ABC Company borrowed loan from bank of Kathmandu Rs 100000 in following terms;
- a. 12% simple interest rate.
- b. 11.5 simple interest rate but quarterly renewable loan.
- c. An installment loan basis at a 6% add on rate with monthly payment.
- d. It buys a terms 1/15, net 60.
- e. From the above policy, which is least expensive on the basis of effective cost.
- ii) Assume that interest rate parity holds and that 180 days risk free securities yield 5 % in china and 5.5% in Britain. In sport market 1 pound equals Chinese yuan 10.5.
  - a. What is the 180 days forward rate according to interest rate parity?
  - b. Is the 180 days forward rate trading at premium or discount? Interpret your result.
  - 19. What do you mean by financial market? Explain different components of financial markets by focusing Nepal stock exchange.

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