

**KARACHI UNIVERSITY BUSINESS SCHOOL  
UNIVERSITY OF KARACHI**

**FINAL EXAMINATION: AFFILIATED COLLEGES**  
**INTRODUCTION TO BUSINESS FINANCE: BA (M) – 621**  
**MBA – III**

Date: June 28, 2009  
Max Marks: 40

Time Allowed: 2 ½ Hours

**Instructions: Attempt any five (05) questions. All questions carry equal marks**

**Q.No.1 (a)**

Consider the following information about two securities:

<u>Security</u>	<u>A</u>	<u>B</u>
Expected Return	.12	.20
Standard Deviation	.10	.30
Portfolio Weight	.80	.20

Required:

What is the expected portfolio return?

**Q.No.1 (b)** You have the opportunity to buy stock with a 5% dividend yield. You have Rs.25000 in cash which you wish to invest. You can buy up to 50% of the stock purchase on margin at 6.25%. What is the total value of the stock which you can purchase so that your taxable income is 0?

**Q.No.2.** A company is considering a project with the following characteristics:

Change in annual revenues	Rs.175, 000
Change in annual depreciation	Rs.20, 000
Change in annual operating costs	Rs.35, 000
Change in annual goodwill amortization	Rs.20, 000
Marginal tax rate is 34%	

Required:

Compute the incremental operating cash flow.

**Q.No.3.** Consider the following two mutually exclusive investments. Calculate the IRR for each. Under what circumstances will the IRR and NPV criteria rank the two projects differently?

<u>Year</u>	<u>Investment A</u>	<u>Investment B</u>
0	- Rs.100	- Rs.100
1	50	70
2	70	75
3	40	10

**Q.No.4.**

You are looking at a three-year project with a projected net income of Rs.1, 000 in Year 1, Rs.2, 000 in Year 2, Rs.4, 000 in year 3. The cost is Rs.9, 000, which will be depreciated straight-line to zero over the three-year life of the project. What is the average accounting return, or ARR?

**Q.No.5.** Below are the most recent financial statements for Waheed Corporation. Prepare a common-size income statement based on this information. How do you interpret the standardized net income? What percentage of sales goes to cost of goods sold?

<b>Waheed Corporation</b>	
<b>2008 Income Statement</b>	
(Rs. In millions)	
Sales	Rs.3, 756
Cost of good sold	2, 453
Depreciation	<u>490</u>
Earnings before interest and taxes	Rs.813
Interest paid	<u>613</u>
Taxable income	Rs.200
Taxes (34%)	<u>68</u>
Net income	<u>Rs.132</u>
Dividends	Rs.46
Addition to retained earnings	<u>86</u>

<b>Waheed Corporation</b>					
<b>Balance Sheets as of December 31, 2007 and 2008</b>					
(Rs. in millions)					
	<u>2007</u>	<u>2008</u>		<u>2007</u>	<u>2008</u>
<b>Assets</b>			<b>Liabilities &amp; Owner's Equity</b>		
Current assets			Current liabilities		
Cash	Rs.120	Rs.88	Accounts payable	Rs.124	Rs.144
Account receivable	224	192	Notes payable	<u>1, 412</u>	<u>1,039</u>
Inventory	<u>424</u>	<u>368</u>	Total	<u>1, 536</u>	<u>1,183</u>
Total	<u>768</u>	<u>648</u>	Long-term debt	<u>1, 804</u>	<u>2, 077</u>
Fixed assets			Owner's equity		
Net plant and equipment	<u>5, 228</u>	<u>5,354</u>	Common stock and paid-in-surplus	Rs.300	Rs. 300
Total assets	<u>5, 996</u>	<u>6, 002</u>	Retained earnings	<u>2, 356</u>	<u>2, 442</u>
			Total	<u>2,656</u>	<u>2,742</u>
			Total liabilities and owner's equity	<u>Rs. 5, 996</u>	<u>Rs. 6, 002</u>

**Q.No.6.**

Mansoor Pharmaceutical has estimated its requirements for the coming year as follows:

<u>Month</u>	<u>Current Assets</u> (million Rs.)	<u>Month</u>	<u>Current Assets</u> (million Rs.)
January	8	July	10
February	12	August	12
March	14	September	16
April	10	October	13
May	13	November	6
June	9	December	11

Fixed assets are expected to remain constant at Rs.20 million. The company's policy is to finance 65% of its maximum temporary asset with permanent financing. Spontaneous current liabilities are expected to be 20% of current assets.

Required:

- i. What is the maximum level of temporary assets for Mansoor?
- ii. What is the level of permanent financing required over the year?
- iii. What is the maximum level of temporary financing required during the year?

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**FINAL EXAMINATION: AFFILIATED COLLEGES**  
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**MBA – III**

Date: January 20, 2008

Max Marks: 60

**Instruction: Attempt any 5 questions.**

Time allowed: 3 Hours

- Q1 (a)** Why should the cost of capital used in capital budgeting be calculated as a weighted, average of the various types of funds the firm generally uses, not the cost of the specific financing used to fund a particular project? **4**
- Q1 (b)** What three approaches are used to estimate the cost of common equity? **4**
- Q1 (c)** What are the weaknesses of Capital Asset Pricing Model (CAPM)? **4**
- Q2 (a)** What are the advantages of matching the maturities of assets and liabilities? What are the disadvantages? **6**
- Q2 (b)** What are the advantages and disadvantages of short-term debt over long term debt? **6**
- Q3 (a)** Why semiannual compounding better than annual compounding from a saver's standpoint? What about a borrower's standpoint? **3**
- Q3 (b)** Define the terms "Annual Percentage Rate" or "APR", "Effective (or Equivalent) Annual Rate" and "Nominal Interest Rate." **3**
- Q3 (c)** What is the future value of \$ 2, 000 deposited today and left in a bank account for three years if it earns 6 percent annually? What if the interest rate is 6 percent compounded semiannually? What if the interest rate is 6 percent compounded quarterly? **6**
- Q4 (a)** Define any 4 of the following: **(2 marks each)** **8**
1. Book Value Per Share
  2. Convertible Preferred Stock
  3. Cumulative Preferred Stock
  4. Dividends in Arrears
  5. Stock Split
  6. Treasury Stock
- Q4 (b)** Which of the following produces an expected dividend yield of 10% of common stock. **4**
- i. Dividends of \$ 100, 000 are expected to be paid next year and expected net income is \$ 1, 000, 000.
  - ii. Dividends of \$ 2 per share are expected to be paid next year and the current market value of stock is \$ 20 per share.

**Q5 (a)** What is the “Multiple IRR Problem”, and what condition is necessary for it to occur. **3**

**Q5 (b)** What is the primary difference between MIRR and the Regular IRR? **4**

**Q5(c)** If a conflict exists, should the capital budgeting decision be made on the basis of the NPV or the IRR ranking? Why? **5**

**Q6** The following data are adapted from a recent annual report of Gateway 2000, a desktop computer manufacturer and mail order company (dollar amounts are stated in millions): **6**

	<b>2008</b>	<b>2007</b>
<b>Balance sheet data:</b>		
Quick assets.....	\$ 574	\$497
Current assets.....	866	649
Current liabilities.....	525	349
Average stockholder’s equity.....	466	350
Average total assets.....	950	760
<b>Income statement data:</b>		
Net sales.....	\$ 3, 676	\$ 2, 701
Gross profit.....	616	358
Operating income.....	249	141
Net income.....	173	96

**Required:**

1. Working capital
2. Current ratio
3. Quick ratio
4. Gross profit ratio
5. Net income ratio
6. Return on average assets
7. Return on average stockholders equity

**Q7** Following are the Projects X and Y, each project has a cost of \$ 10, 000 and the cost of capital of each project is 12 percent. The projects expected net cash flows are as follows: **6**

<b>Year</b>	<b>Project X</b>	<b>Project Y</b>
0	(\$ 10, 000)	(\$ 10, 000)
1	6, 500	3, 500
2	3, 000	3, 500
3	3, 000	3, 500
4	1, 000	3, 500

**Required:**

Calculate each projects discounted payback period, net present value (NPV) and internal rate of return.

**KARACHI UNIVERSITY BUSINESS SCHOOL**  
**UNIVERSITY OF KARACHI**  
**FINAL EXAMINATION, SPRING – 2006: AFFILIATED COLLEGES**  
**INTRODUCTION TO BUSINESS FINANCE: BA (M) – 621**  
**MBA – III**

Max Marks: 60  
Date: July 03, 2006

Time Allowed: 3 Hours

**INSTRUCTIONS**

Attempt any FIVE (05) questions. All question carry equal marks.

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- Q.No.1.** (a). Define the term “Finance”. There are four levels or major decision areas for financial decision makers. Discuss.
- (b). How is finance related to the discipline of accounting and economics?
- (c). Suppose Ali invest Rs.10, 000 in a partnership and Rs.10, 000 in a corporation’s stock. Twelve years later, the two organizations liquidate each leaving debts of Rs.50, 000. For how much of each debt is Ali liable?
- Q.No.2.** (a). Baba’s Sporting Goods Company had retained earnings of Rs.3 million at the end of 2004. During 2005, the company had earnings available to common stockholders of Rs.500, 000 and of this paid out Rs.100, 000 in dividends. What is the retained earnings figure for the end of 2005?
- (b). Why would a creditor be interested in current assets and current liabilities?
- (c). Why is the return on common stockholder’s equity such a key figure to consider?
- Q.No.3.** (a). What is the present value of the following cash flow stream if the discount rate is 15%?
- |           |     |     |     |     |    |
|-----------|-----|-----|-----|-----|----|
| Year      | 0   | 1   | 2   | 3   | 4  |
| Cash Flow | 100 | 150 | 200 | 100 | 50 |
- (b). A 25 year old MBA making Rs.50, 000 per year wants to be making Rs.100, 000 per year by the time she is 30. What annual percentage raises are necessary for her to reach her goal?
- (c). Your Rs.1, 445 annual loan payment reduces your loan balance from Rs.14, 233 at the beginning of the year to Rs.13, 850 at year’s end. What is the interest rate on the loan?
- Q.No.4.** (a). You have recently accepted a one year employment term by a firm. The firm has given you the option of receiving your salary as lump sum value of Rs.30, 000 at the end of the year or as 12 monthly payments of Rs.2, 400 starting one month after you start work. If your relevant discount rate is 2% per month, then which salary options would you prefer?

- (b). The capital budgeting director of Shahid Corporation is evaluating a project which costs Rs.200, 000, is expected to last for 10 years and produce after tax cash flows, including depreciation, of Rs.44,503 per year. If the firm's cost of capital is 14%, what is the project's IRR?

**Q.No.5.** Analysis of the accounting records of Ahmed Corporation reveals:

Cash Sales.....	Rs.9, 000	Increase in current assets other than cash.....	Rs.17, 000
Loss of sale of land.....	5, 000	Payment of dividends.....	7, 000
Acquisition of land.....	37, 000	Collection of accounts receivable.....	93, 000
Payments of accounts payable...	48, 000	Payments of salaries and wages...	34, 000
Net Income.....	21, 000	Depreciation.....	12, 000
Payment of income tax.....	13, 000	Decrease in current liabilities.....	23, 000
Collection of dividend revenue...	7, 000		
Payment of interest.....	16, 000		

**Required:**

Compute Cash flows from operating activities by the Direct Method.

**Q.No.6.** Compute four ratios that measure ability to earn profits for Karachi Packaging Inc.

**KARACHI PACKAGING, INC.  
COMPARATIVE INCOME, STATEMENT  
Years Ended December 31, 2005 and 2004**

	<b>2005</b>	<b>2004</b>
Net sales	Rs.174, 000	Rs.158, 000
Cost of Goods sold	<u>93, 000</u>	<u>86, 000</u>
Gross Profit	81, 000	72, 000
Selling and General Expenses	<u>48, 000</u>	<u>41, 000</u>
Income from Operations	33, 000	31, 000
Interest Expense	<u>21, 000</u>	<u>10, 000</u>
Income before Income Tax	12, 000	21, 000
Income Tax Expenses	<u>4, 000</u>	<u>8, 000</u>
Net Income	<u>Rs.8, 000</u>	<u>Rs.13, 000</u>

**Additional data:**

	<b>2005</b>	<b>2004</b>
Average total assets	Rs.204, 000	Rs.191, 000
Average common stockholder's equity	Rs.96, 000	Rs.89, 000
Preferred dividends	Rs.3, 000	Rs.3, 000
Shares of common stock outstanding	20, 000	20, 000

Did the company's operating performance improve or deteriorate during 2005?

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**Total Marks: 60**  
**2007**

**Date: January 13,**

**Time: 3 Hrs.**

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**Instructions: Attempt five questions.**

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**Question # 1**

- a. On April, Ahmed is considering the purchase of ten Rs.1, 000 face amount bonds that pay interest at 6% on March 31 of each year. The bonds mature on March 31, eight years hence. On April 1, the market rate of interest for bonds of this type stands at 10%. Calculate what Ahmed should expect to pay for the bonds.
  
- b. A student starts college with Rs.100, 000 in a bank account paying 10% interest. The student withdraws Rs.15, 000 at the beginning of the 1<sup>st</sup> year and another Rs.15, 000 the beginning of the 2<sup>nd</sup> year. How much is left at the beginning of the junior year?

**Question # 2**

- a. What are the fundamental financial decisions that must be made?
- b. What are the important variable to consider in making financial decisions?
- c. Contrast share holder wealth maximization with profit.

**Question # 3**

- a. What is meant by the term financial analysis? What role does ratio analysis play in financial analysis?
- b. Financial ratios are based on historical data. Of what use are they in developing expectations about the future?
- c. Academy Control Systems has requested that you determine whether the company's ability to pay its current liabilities and long-term debts has improved or deteriorated during 2006. To answer this question, compute the following ratios for 2006 and 2005: (a) current ratio, (b) acid-test ratio, (c) debt ratio, and (d) times-interest-earned ratio. Summarize the results of your analysis.

	2006	2005
Cash.....	Rs.21, 000	Rs.47, 000
Short-term investment.....	28, 000	----
Net receivables.....	102, 000	116, 000
Inventory.....	226, 000	263, 000
Prepaid expenses.....	11, 000	9, 000
Total assets.....	503, 000	489, 000
Total current liabilities.....	205, 000	241, 000
Total liabilities.....	261, 000	273, 000
Income from operations.....	165, 000	158, 000
Interest expense.....	36, 000	39, 000

**Question # 4**

The credit terms for each of three suppliers are shown in the following table.

Supplier	Credit terms
X	1/10 net 55 EOM
Y	2/10 net 30 EOM
Z	2/20 net 60 EOM

- Determine the approximate cost of giving up the cash discount from each supplier.
- Assuming that the firm needs short-term financing, recommended whether it would be better to give up the cash discount or take the discount and borrow from a bank at 15 percent annual interest. Evaluate each supplier separately using your findings in a.
- What impact, if any, would the fact that the firm could stretch its accounts payable (net period only) by 20 days from supplier Z have on your answer in b relative to this supplier?

**Question # 6**

National Manufacturing Company is considering two mutually exclusive investments. The projects expected net cash flows are as follows:

Year	Expected Net Cash Flow	
	Project A	Project B
0	(Rs.300)	(Rs.405)
1	(387)	134
2	(193)	134
3	(100)	134
4	600	134
5	600	134
6	850	134
7	(180)	-0-

- What is each project's IRR?
- If you were told that each project's cost of capital is 10 percent, which project should be selected? If the cost of capital were 17 percent, what would the proper choice be?

**Question # 6**

- What factors make it necessary to maintain current assets?
- What is the operating cash conversion cycle? What does it measure? How can it be used?
- Distinguish between temporary current assets and permanent current assets.
- Define working capital management. What are the different policies that managers must consider in designing their working capital policies?