



Final Examination Summer 2003

June 03, 2003

**BUSINESS FINANCE DECISIONS**  
**Module 'F' Paper F-19**

**(MARKS 100)**  
**(3 hours)**

Q 1 Mosab enterprises, an exporter of leather products to Turkey, has recently acquired a large-sized order. The order requires a liaison office to be set up in Turkey till the completion of the contract. Mr. Zaiku, Manager of a Turkish resident company, has been offered to act as an agent of Mosab enterprises for this contract and to oversee the liaison office. The fee to be paid to Mr Zaiku will be Lira 1 billion per month commencing from the month of export realization. Also a joining bonus of Lira 15 billion will be paid in the beginning. The cost of exporting goods is estimated to be Rs 500,000 payable immediately.

The exports will take place during the next year, and the cash will be received in the following manner:

Months from now	Amount in Lira (millions)
1	-
2	-
3	6,000
4	5,000
5	4,000
6	3,000
7	4,000
8	5,000
9	6,000
10	6,000
11	6,000
12	2,000

Current exchange rate between the two currencies is Lira 26,000 per Rupee. The borrowing and lending rates prevailing are 9% and 6% for Rupee and 22% and 13% for Turkish Lira. Mosab Enterprises is a cash rich company, and uses a cost of capital of 13% for appraising its short-medium term projects.

Mosab enterprises is worried as to the falling value of the Turkish Lira. Their bankers have offered them a currency SWAP with one of their Turkish clients. But the SWAP available is for Lira 20 billion having a tenor of one year. Under the SWAP agreement, Lira 20 billion will be received by Mosab enterprises at inception of SWAP against the payment of Rupees at current exchange rate. The same transaction will be reversed at the end of the SWAP term. As Lira is weakening, Mosab will place excess Lira funds available in Lira deposits only to the extent required to meet the maturity value of SWAP of Lira 20 billion. Once sufficient amount is deposited to make available the maturity value of the SWAP, any further Lira funds will be converted into Rupees.

(2)

Assuming that the currency rates follow a uniform pattern indicated by the borrowing interest rates of relevant currencies and the value of Lira devalues against Pak Rupee approx 0.943% on a month to month basis.

**Required:**

Advise the management of Mosab enterprises, with supporting computation, whether it should enter into the currency SWAP or not and also advise the maximum price that Mosab enterprises should pay for such SWAP. (15)

Q 2 You are the treasurer of XYZ consulting company, which has received an extraordinary consulting fee of Rs 20 million on July 1, 2003 from one of the consulting work performed for Nubian Limited. Your company expects to utilise this amount as part payment for the opening of its new offices in Lahore and Islamabad. The work for these offices has been contracted out to HConstruction Company. The cost of new offices is expected to be in the range of Rs 50 million to Rs 60 million, payable as follows:

Date	Amount (Rs million)
June 30, 2004	25
July 31, 2004	10
June 30, 2005	Balance

However, due to local land taxation laws at these new sites, an additional Rs 8 million may have to be paid to contractors for onwards payments to land taxation authorities on January 1, 2004. The chances of such payment are only 40%.

As a treasurer, you are concerned about placing this money into short term money market investments. Your banker has offered you the following products:

<u>Fixed Deposit Rates (p.a.)</u>	<u>To mature on</u>	<u>If premature withdrawn (p.a.)</u>
%		%
6.5	June 30, 2004	4
5.5	Dec 31, 2003	3.5

Interest rate on savings account is 4.5% p.a. whereas overdraft arrangements are costing 8% p.a.

Considering the probability of the cash flow relating to land taxation payments, evaluate the following options:

<u>Placements</u>	<u>Options</u>
(a) 1 year deposits	Early withdrawal in case of land taxation payment
(b) 1 year deposits	Utilization of overdraft in case of land taxation payment
(c) 6 months deposits	Utilization of deposit for land taxation payment
(d) 6 months deposits	Utilization of overdraft for land taxation payment
(e) Savings account	

**Required:**

You are required to calculate the most profitable option, showing all the relevant workings. Further, compute the effective rate of return earned by your company on the basis of best placement mix. (10)

- Q 3 Alpha Ltd is a Pakistan resident company involved in the production, marketing and sale of semi-conductor chips to the electronics related companies mostly situated in the northern territories of the country. The company has its biggest production plant in Karachi, which produces almost 60 percent of the total required chips. The useful life of the company's biggest plant is almost over which is resulting in heavy maintenance cost to the company. The maintenance cost of the plant for the year just ended was Rs 3.5 million. The engineers have calculated that this cost in real terms, will follow an exponential pattern given by the following formula:

$$\text{Real Maintenance Cost} = \text{Rs } 1,750,000 \times \text{Maintenance Cost Factor (MCF)}$$

The value of respective years of MCF is as follows:

<u>Years from now</u>	<u>MCF</u>
1	2.1435
2	2.2974
3	2.4623
4	2.6390
5	2.8284

With these maintenance costs being incurred, the company can use this plant for another 5 years' growth with no scrap value at the end. If this plant is sold now, a post tax value of Rs150,000 could be obtained. No tax depreciation allowance was obtained on this plant, as the entire cost was tax deductible in the year the plant was installed.

In the latest Board of Directors meeting, a number of issues have been identified. A brief summary of these issues is as follows:

- The production director has informed that Karachi plant can be shifted to another location in the northern territories where labour is cheap. This would result in a decrease in variable cost per unit to  $\frac{3}{4}$ <sup>th</sup> of last year's cost, which was Rs 250 per unit. The company earned a contribution of Rs 100 per unit in the last year with a production and sale of 100,000 units. Increase in fixed cost, however, will be Rs 4 million p.a. The company has seen a growth in sales volume of 4% p.a. in the last 5 years, which is expected to remain the same in future.
- If half of the decrease in the variable cost is used in reducing the sale price, it will make Alpha Ltd's prices comparable with those of US based companies resulting in the expansion of Alpha Ltd's operations in US with a sales increase of 20,000 units increasing at a steady rate of 7% p.a.
- The set up cost of new plant will be Rs 20 million. Tax depreciation allowance will be available on 80% of this cost @ 25% p.a. on reducing balance method from the year of production, whereas the balance of 20% will not be allowable for tax purposes. The life of the new plant is expected to be 5 years, with a then post tax scrap value of Rs 500,000. When the plant will be sold at the end of its life, the tax loss on disposal shall be allowed for tax purposes.

(4)

- The closure of Karachi plant would result in Alpha Ltd being exposed to relocation costs of Rs 7.5 million in the year of closure. This cost is tax allowable in the year incurred.

(All the above cash flows are in real terms hence no adjustment for inflation is required)

The details of the existing capital structure of the company is as follows:

- The company has 10,000 Rs 100 debentures in issue, being traded at 112 percent. The real rate of return for the debt investors is 3.67% p.a. Alpha Ltd also has Rs 380,000 floating rate bank loan.
- 100,000 shares of par value Rs 10 are in issue, being traded at Rs 37.50. Equity market is offering a nominal return of 16.75% p.a. whereas all equity companies in the similar industry as Alpha Ltd have an equity beta of 1.35. The risk free rate prevailing is 6% p.a.
- Current rate of inflation is 9% p.a. Taxation rate applicable to the company is 33% with tax being paid one year in arrears.

**Required:**

Being a financial consultant, you have been asked by the Board to advise whether Alpha Ltd should opt for the shifting of the plant to new location. You should also mention an indicative increase / decrease in the value of the company, if the project is accepted. Alpha Ltd evaluates its similar projects using weighted average cost of capital adjusted for inflation. (30)

Q 4 Beta Limited is in the business of manufacture and sale of consumer products. The company has seen a good growth primarily due to expansion of market. Last year's turnover was Rs 9.5 million. The company has a debt to equity ratio of 24:76 on the basis of book value, with debt being Rs 1.2 million.

An analysis of the financials has revealed that the company operates on an asset turnover of 2, computed on the basis of average assets employed during the year. At an average, profit before interest and taxation has been at 18% of turnover, with taxation rate being 30%.

The company has a stand-by arrangement with a local bank to extend funding at a cost of 12% p.a.

In order to achieve the growth, company needs more investment but the only source of funding available is either through profit retention or the banking arrangement as mentioned above, however, as per the conditions imposed by the bank the company is required to maintain the existing debt: equity ratio.

Assume that the profits are earned evenly throughout the year and in order to maintain the debt : equity ratio the additional bank funds can be drawn freely throughout the year.

**Required:**

Prepare working to check whether the company can achieve the target growth in sales of 30%. In case if the company is unable to achieve the sales growth target, what is the maximum percentage growth in the sales that company can achieve in the circumstances?

(10)

- Q 5 (a) What is the significance of a mission statement for an organization. What considerations should be given while preparing a mission statement of a public company. (05)
- (b) What is synergy and briefly describe the kind of synergies that are available in a business combination. (05)
- (c) A medium size airline company with a limited scale domestic and international operations is considering to acquire the business of a air-way courier company or a cargo shipping line. You are required to prepare a report on the synergies, the company would have in both the cases.. (05)

Q.6 Hamdard Health Care Limited is in the business of making medical tools and equipments which are meant for incapacitated patients or those suffering with diseases which seriously hamper their ability to lead a normal life. 90% of their sales are to old patients.

The owners of the company have decided to sell the company. It has four direct competitors in the country and each company has about 20% share of the market.

The balance sheet of Hamdard Health Care Limited is given below:

	2002 (Rupees in thousand)	2001
Long-term assets		
Land and building	1,125	1,125
Plant and equipment	2,250	2,100
Furniture and fixture	<u>450</u>	<u>525</u>
	3,825	3,750
Deferred Research and development expenditure	675	300
Current assets		
Stocks	6,375	5,250
Debtors	4,500	3,375
Cash	<u>2,250</u>	<u>697</u>
	13,125	9,322
Current Liabilities	1,500	1,125
Net current assets	<u>11,625</u>	<u>8,197</u>
	<u>16,125</u>	<u>12,247</u>
Financed by		
Share capital	750	750
Accumulated profit	3,060	2,497
Long term loan	<u>12,315</u>	<u>9,000</u>
	<u>16,125</u>	<u>12,247</u>

The following further information is available

- (a) Land and building were recently valued at Rs.1.5 million. The plant and equipment is worth Rs.2.8 million in the open market.

(6)

- (b) Stock-in-trade are shown in the balance sheet at cost. Half of the value relates to a new product developed by the company. The other half relates to the old products.
- (c) The projected average cost structure for the newly developed product and the existing products is as follows:

	New (Rupees per unit)	Existing
Cost	15	20
Selling Price	50	60

The volume in sales will increase by 10% in 2003. The company expects the new range of products to take 50% of its sales volume almost immediately upon launch in 2003 and that this sales mix will stay more or less constant.

- (d) Debtors are mainly private hospitals, charitable institutions and local health authorities.

Recent profit and loss accounts include the following:

	<u>2002</u>	<u>2001</u>	<u>2000</u>
		Rs 000	
Turnover	<u>26,250</u>	<u>24,750</u>	<u>22,500</u>
Profit	3,525	3,465	3,375
Interest expenses	<u>1,500</u>	<u>1,125</u>	<u>750</u>
Profit after interest	2,025	2,340	2,625
Taxation	<u>412</u>	<u>562</u>	<u>600</u>
Profit after tax	1,613	1,778	2,025
Dividends	<u>1,050</u>	<u>900</u>	<u>750</u>
Profit retained	<u>563</u>	<u>878</u>	<u>1,275</u>

Further information:

- (i) Profit for 2002 includes an exceptional profit of Rs.150,000 arising from the sale of a patent previously valued at nil.
- (ii) The population of old people is expected to increase as under:

<u>Year</u>	<u>Population of old people (in millions)</u>
2002	4.8
2007	5.5
2012	6.5
2017	7.6
2022	8.8

- (e) The Research and Development expenditure has been as follows:

<u>Year</u>	<u>Amount (Rs. 000)</u>
2000	250
2001	300
2002	375

The company has started to show these in the balance sheet from the year 2001.

- (f) The average P/E ratio for the health care sector is 18.

**Required:**

- (1) A prospective buyer who is a new entrant into the sector has asked you to:
- (a) Compute the value of the business on December 31, 2002 based on two different types of valuation methods. **(05)**
  - (b) Prepare revised profit and loss account for the year 2000, 2001 & 2002, which shall be more relevant for the prospective buyers. **(02)**
  - (c) Evaluate the performance of the company based on
    - sales growth
    - net margins
    - return on capital employed
    - stock days
    - debtor days. **(05)**
  - (d) Comment on the future prospects of the company and show relevant calculations. **(04)**
- (2) What can the owners of Hamdard Health Care Limited do to improve the price of the company. **(04)**

**(THE END)**