



Final Examinations Winter 2003

December 02, 2003

**Specified Paper of  
Advanced Accounting & Financial Reporting; Management Accounting;  
Business Finance Decisions.  
Module F**

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

Q.1 The accountant of Systems Limited has prepared following report on the cost of quality for the last three years. He needs someone to help interpret these results.

**Systems Limited  
Cost of Quality Report  
2000-2002**

Cost description	2000	2001	2002
	Rupees	Rupees	Rupees
Amortization of testing equipment	100,000	95,000	87,000
Disposal of defective products	120,000	180,000	225,000
Inspection	110,000	105,000	100,000
Net cost of scrap	52,000	71,000	91,000
Product recalls	80,000	105,000	135,000
Product testing	85,000	86,000	80,000
Quality engineering	40,000	38,000	37,500
Rework labour	60,000	81,000	89,500
Statistical process control	45,000	46,000	48,000
Supplies used in testing	87,500	83,000	75,500
System development	105,000	100,000	90,000
Warranty repairs	106,500	130,500	194,500
Warranty replacements	95,500	108,500	142,500
<b>TOTAL</b>	<b>1,086,500</b>	<b>1,229,000</b>	<b>1,395,500</b>
% of sales	11.44%	12.94%	14.69%

The amount of sales is Rs 9,500,000 for each year.

**Required:**

- (a) Calculate the prevention costs and the external failure costs for every year (2000-2002), including the total costs as a percentage of sales. (09)
- (b) Interpret your answer in part (a), and explain briefly the effect of the results on future sales. (03)
- Q.2 (a) What is a "Responsibility Center"? List and define four common types of responsibility centers. (06)
- (b) Explain the manner to obtain positive behavioral effects from a 'Responsibility Accounting' system. (04)
- (c) Why the basis of evaluation of segments differs from the basis of evaluation of segment managers? (03)

Q.3 XYZ Company Ltd. has produced the following Net profit figures.

	<i>(Rupees in Million)</i>
20X6	1.1
20X7	1.5
20X8	1.8

On 01 Jan 20X7, the number of shares outstanding was 500,000 shares. During 20X7 the company announced a rights issue with the following details:

- Rights: 1 new share for each 5 shares outstanding
- Exercise Price: Rs. 5
- Last date to exercise rights is 01 March 20X7.

The market value of one share in XYZ Co., immediately prior to exercise on 01 March 20X7 is Rs. 11.

**Required:**

Calculate EPS for the years 20X6, 20X7, and 20X8.

**(10)**

Q.4 (a) A lessee enters a leasing arrangement on 31 December 20X3 for a piece of equipment costing Rs.47,460. The lease requires the payment of an annual rental of Rs. 13,610 payable in advance. The primary period of the lease is four years. After the end of primary period, the lessee has the right to extend the lease indefinitely on payment of a nominal annual rental. The lessee believes that the equipment will last for four years and will have no scrap value at the end of that period. The lessee depreciates assets of this type using the straight line basis. Both the lessor and the lessee have accounting periods ending on 31 December.

- i) Calculate the IRR of the lease.
- ii) Prepare the note of "Debtors" as it would appear in the accounts of the lessor.

**(10)**

(b) State the disclosure requirements for Lessees in case of operating leases in accordance with IAS – 17.

**(05)**

Q.5 (a) What do you understand by the term Related Party Transaction.

**(01)**

State the related party disclosure relating to:

- (i) Related party relationship where control exists.
- (ii) When there has been a transaction between related parties
- (iii) Items of similar nature

**(02)**

**(02)**

**(02)**

Q.6 The Board of Directors of Kids Limited decided to dispose off, one of their segment "Boss". On 10<sup>th</sup> May 2002, when the assets and liabilities of "Boss" were Rs. 5,250,000 and Rs. 750,000 respectively, the approval and announcement of disposal was made. The net recoverable amount of the assets was determined as Rs. 4,250,000.

(3)

On March 31, 2003, when the carrying amount of net assets was Rs.3,500,000 Kids Limited signed a legally binding contract to sell "Boss". The sale is expected to be completed by July 31, 2003. The recoverable amount of the net assets as on March 31, 2003 was Rs. 3,000,000. The process requires incurrence of additional cost of Rs. 1,500,000 payable by July 31, 2003. The operations of "Boss" continued throughout 2002-2003.

Other data of Kids Limited includes:

	2002 – 2003	2001 – 2002
	Rs.	Rs.
Revenue	7,000,000	7,000,000
Operating expenses	4,500,000	4,600,000
Interest expenses	1,250,000	750,000

Boss's financial data included in the above was

	2002 – 2003	2001 – 2002
	Rs.	Rs.
Revenue	2,000,000	2,500,000
Operating expenses	1,500,000	1,350,000
Interest expenses	250,000	250,000

The corporate tax rate is 35%.

**Required:**

The income statement for Kids Limited for the year ended June 30, 2003 and 2002, in the light of IAS 35 - Discontinuing Operations. (08)

Q.7 Milk & Cereals Limited (MCL) is a well established food products company in Pakistan, directing its focus mainly on the areas of milk and primary cereals. Two of its major selling brands are "Pure Milk (PM)" and "Healthy Cereals (HC)". PM has an established market and expected sales for the next year are estimated at monthly average of 90,000 litres. Similarly, HC in the next year is expected to have an average monthly sale of 63,000 kgs. Sales of the product is expected to grow at a rate of 2% per annum. Production quantities on average equal the sales quantities. Both the products are produced on separate plants. For next year the capacity utilization is expected to be 90%. PM in the next year will be sold at a price of Rs 10 per litre and HC at Rs 125 per kg. Prices are subject to 5% increase per annum.

MCL is typically financed with an aggressive debt-funding strategy characterised by high level of gearing (about 60% debt and 40% equity based on the book values) and a mix of fixed rate debentures and floating rate bank loan with quarterly rolling. Equity comprises of 1,000,000, Rs.10 Class 'A' Ordinary voting shares and 500,000 Rs.15, Class 'B' Ordinary non-voting shares. Class 'B' shareholders, being non-voting, require 25% more return than the Class 'A' voting shares. Class 'A' shares are being traded at Rs 25 and Class 'B' at Rs 29. There is also an amount of Rs 2,302,167 being carried in the balance sheet in the form of reserves. Debt comprises 15000, 12% debentures having par value of Rs.1000 each with 15 years maturity period. These were issued 3 years ago and are redeemable at 15.50% premium. Effective yield on these debentures when issued was 12.40%. The current market value of debentures is Rs 1,186. Bank loan was taken 5 years ago.

(4)

The company has recently been approached by United Nations High Commission for Refugees (UNHCR) for a 10 years contract of its product HC to be supplied to refugees. Price offered is at 25% discount to the market price for the next year. Initial quantity to be supplied is 7,000 kgs. per month. The required quantity is to increase at a steady rate of 3% per annum. Price in real terms is to remain fixed for the term of the contract.

As the current capacity is not enough for the production the company is prepared to install a new plant at a cost of Rs 10 million with annual capacity of 100,000 kgs. The plant will be installed as and when the old plant capacity is not enough to meet the sales requirement, as the plant installation time is not expected to be more than a week. The plant is expected to have a working life of 9 operating years with a scrap value equal to 10% of its cost. Initial and normal depreciation rates are 50% and 10% respectively. No depreciation is allowed in the year of disposal, and any gain or loss on disposal is treated as business income or expense.

UNHCR has arranged a subsidised loan for MCL to the extent of the capital investment required. Loan carries an interest of 7% p.a. and will be repayable at the end of the supply contract. Working capital investment of Rs 500,000 and Rs 1 million is required at the end of year 2 and year 3 respectively.

Fixed costs associated with the current plants are Rs 1.5 million a year. The new plant for HC being installed will have fixed costs of:

Capacity Utilised	Annual Fixed Cost (Rs)
Not more than 50%	200,000
More than 50%	300,000

Variable production cost per kg of HC is Rs 75. These costs in real terms are not expected to change in future as any price or rate change is expected to be met by production efficiency.

Taxation rate applicable to MCL is 35%. Inflation rate prevailing is 3.67% p.a. which is not expected to materially change in future. Companies in the same industry as MCL have an averaged equity beta of 1.40 and an average Debt to Equity ratio of 30:70. Market return is 16% p.a. and risk free return rate is 7%. Current applicable rate of medium to long term debt to MCL is 10% before any taxes.

Assume that all costs and revenues given here are real. Tax is being paid in the year the charge arises.

**Required:**

Compute the Net Present Value of the project, if financed through the subsidized debt as arranged by UNHCR, and advise the management as to the desirability of going for this project. (35)

(THE END)