

December 06, 2005

**SPECIFIED PAPER OF  
ADVANCED ACCOUNTING & FINANCIAL REPORTING;  
MANAGEMENT ACCOUNTING;  
BUSINESS FINANCE DECISIONS.**

(Marks 100)

(3 hours)

Q.1 Following is the trial balance of Executive Bank Limited as at June 30, 2005:

<b>Trial Balance</b>		<b>Dr.</b>	<b>Cr.</b>
		<b>Rs. in '000'</b>	
Cash in hand - local currency		167,800	
- foreign currency		257,000	
Current account # 23512 with SBP		480,000	
Current accounts in \$, £ and € with SBP		360,000	
Deposit account in \$ with Central Bank of Oman		35,000	
Current account with United Bank Limited, Karachi		73,000	
Current account with National Bank of Pakistan		100,000	
Deposit account with Citibank, New York		837,000	
Investment in COIs of NBFIs		200,000	
Lending to NBFIs under Reverse Repo		935,000	
Treasury bills		500,000	
Investments in subsidiaries		200,000	
Ordinary shares of listed companies		7,000	
Term finance certificates		75,000	
Advances		3,500,000	
Miscellaneous current assets		150,000	
Fixed assets		1,245,000	
Surplus on revaluation of fixed assets			120,000
Deferred tax		27,000	
Bills payable			300,000
Borrowing from SBP under export re-finance			175,000
Overdrawn nostro accounts - unsecured			71,000
Borrowing under repo with local banks			275,000
Deposits from customers - fixed			1,200,000
- savings			2,600,000
- current			350,000
- miscellaneous			182,450
Payable to a leasing company under finance lease			46,000
Payable to a leasing company under operating lease			2,000
Payable to suppliers			2,000
Withholding tax payable			350
Markup payable			175,000
Share capital			1,200,000
General reserves			1,500,000
Reserve for issue of bonus shares			150,000
Statutory reserve			800,000
		9,148,800	9,148,800

(2)

Following further information is available:

1. 30% of investment in treasury bills have been given as collateral.
2. Investment in ordinary shares is primarily used for trading on stock exchange.
3. 40% TFCs will mature in January 2006 whereas the rest will mature in January 2007, however the bank intends to dispose all of them in January 2006.

**Required:**

Prepare the balance sheet of the bank as at June 30, 2005 alongwith the following notes to the extent the information is available, in accordance with the laws applicable in Pakistan:

- Cash and bank balances
- Investments (investment by segments is not required)
- Borrowings from financial institutions

(15)

- Q.2 T Limited, a public listed company, entered into an expansion programme on July 1, 2004. On that date, the company purchased 80% of the share capital of Alpha Ltd and 40% of the share capital of Beta Ltd. For Alpha, T Ltd paid total consideration of Rs.25 million. This was settled by signing a loan agreement of Rs.20 million carrying interest at 7% payable semi-annually and the balance by issuing 200,000 ordinary shares of T Limited. Shares of Beta Ltd., were acquired by a 1 for 1 share exchange. The market value of T Limited's share at the date of acquisition was Rs 25. The year end of all the companies is June 30.

Extracts from their balance sheets at June 30, 2005 are as under:

	<b>T Ltd</b> <b>Rs. 000</b>	<b>Alpha Ltd</b> <b>Rs. 000</b>	<b>Beta Ltd</b> <b>Rs. 000</b>
<b>Fixed Assets:</b>			
Land	5,000	4,000	3,500
Building	8,000	6,000	5,500
Plant	22,400	14,000	12,000
<b>Current Assets:</b>			
Stocks	10,000	9,000	16,200
Trade debts	9,200	7,000	2,800
Cash	Nil	3,000	4,300
<b>Share Capital and Reserves:</b>			
Ordinary shares of Rs.10 each	10,000	20,000	25,000
Un-appropriated profits	20,000	15,000	4,500
<b>Current liabilities:</b>			
Creditors	12,000	5,300	13,600
Running finance	3,000	Nil	Nil
Taxation	9,600	2,700	1,200

(3)

The following further information is available:

- T Ltd. has not recorded the acquisition of the above investments nor the issue of new shares at the time of preparing the above balance sheet. However interest on loan of Rs.20 million has already been account for.
- The book values of the assets of Alpha Ltd. and Beta Ltd., at the date of acquisition, were considered to be a reasonable approximation of their fair values with the exception of fixed assets of Alpha Ltd. These were considered to have the following fair values.

Land	Rs. 5.0 million
Plant	Rs.16.0 million

The plant had a remaining life of 4 years at the time of acquisition.

- The profits of Alpha Ltd. and Beta Ltd., for the year ended June 30, 2005, as reported in their financial statements, were Rs.8 million and Rs. 2 million respectively. No dividends have been paid by any of the companies during the year.

**Required:**

Prepare the Consolidated Balance Sheet of T Ltd. as at June 30, 2005. (18)

- Q.3 As a credit analyst in a bank, you have been given the following summarized profit and loss statement and balance sheet of XYZ Limited:

**Profit and loss account  
For the year ended September 30, 2005**

	Rs. '000'
Sales	62,400
Cost of goods sold	51,090
	<hr/> 11,310
Selling and administrative expenses	1,560
Profit before interest and tax	<hr/> 9,750
Interest expense	1,755
Profit before tax	<hr/> 7,995
Tax	3,198
Profit after tax	<hr/> <hr/> 4,797

**Balance Sheet  
As on September 30, 2005**

	Rs. '000'
<b>Capital and liabilities</b>	
Paid up capital 1,365,000 shares of Rs.10 each	13,650
Retained earnings	4,680
Debentures	29,250
Creditors	7,020
Bills payable	780
Other current liabilities	3,120
	<hr/> <hr/> 58,500

(4)

<b>Assets</b>	
Net fixed assets	31,200
Inventory	15,600
Debtors	7,825
Marketable securities	1,925
Cash	1,950
	58,500

Current market price per share is Rs.22.

Industry's averages are as follows:

– Current ratio	2.3
– Quick ratio	1.6
– Sales to inventory	7.0
– Average collection period	32 days
– Price per share / book value of the share	1.4
– Debt to Assets ratio	38%
– Time interest earned	7
– Profit margin	8%
– Price to earning ratio	10
– Return on total assets	10%

**Required:**

- (a) XYZ Limited has applied for a short term loan of Rs.20 million. You are required to evaluate the financial position of XYZ Limited and advise whether the loan may be sanctioned.
- (b) What will be your evaluation if sales to inventory ratio and average collection period are reduced to the industry average? (12)

Q.4 A company has decided to replace a machine which is presently being used in its manufacturing process. The machine will cost Rs. 36.0 million and will have a life of five years, with no residual value. However, the company is not certain that it will require the machine for the full five years because it is considering a more elaborate system that would make this machine redundant.

The following financing options are available to the company:

**Option 1**

The option is to buy the machine and borrow Rs. 36.0 million from the bank. The loan will be repaid by payment of a fixed annual amount on the last day of each of the five years. The amount paid would comprise repayment of principal and interest @ 20% per year.

(5)

**Option 2**

A special lease can be taken at an annual installment of Rs. 12.04 million payable at the end of the year. There is also a facility to cancel the lease at the end of any year. A penalty of Rs. 1.85 million will have to be paid if the lease is cancelled at the end of first year and a penalty of Rs. 1.0 million if it is cancelled at the end of second year. There are no penalties for cancellation at the end of third or fourth years.

The machine can be sold at the end of any year for 80% of its book value.

The Company assesses the probability of its keeping the machine as follows:

	<i>Probability</i>
For one year	0.2
For two years	0.3
For three years	0.2
For four years	0.2
For five years	0.1

Assume that lease payments and loan repayments are made at the end of each year and that the company receives capital allowances of 20% on a straight-line basis. Tax at the rate of 33% on profits is paid in the year after that in which the profits are earned.

**Required:**

Advise the company whether it should lease or buy the machine in the following circumstances:

- (a) if it is certain to keep the machine for the whole five years;  
 (b) if it is uncertain of the time the machine will be kept. (17)

Q.5 Akhtar Company (AC) encounters significant uncertainty with its sales volume and price in its primary product. The base case, best case, and worse case scenarios and probabilities are provided in the table below:

	<b>Probability of Outcome</b>	<b>Unit Sales Volume</b>	<b>Sales Price (Rs.)</b>	<b>NPV (Rs. 000)</b>
Worst case	0.30	6,000	3,600	(6,000)
Base case	0.50	10,000	4,200	13,000
Best case	0.20	13,000	4,400	28,000

**Required:**

What is AC's expected NPV, standard deviation of NPV, and coefficient of variation of NPV? (08)

(6)

- Q.6 A factory is planning to buy some machines to produce boxes and has a choice of A or B type machines. Rs.19.2 million has been budgeted for the purchase of machines. A type machine costs Rs.0.6 million each, requires 25 hours of maintenance and produces 3,000 units a week. B type machine costs Rs.1.2 million each, requires 10 hours of maintenance and produces 4000 units a week.

Each type of machine needs 100 square meters of floor area. Floor area of 2000 square meters and maintenance time of 400 hours are available each week. Since all production can be sold, the factory management wishes to maximize output.

**Required:**

- (a) List down the objective function and constraints.  
 (b) Graph the constraints shading the feasible region.

(08)

- Q.7 Stylo Garment after serving large garment brands for many years introduced its own brand. After successful completion of first year of soft launching of its products, the company planned aggressive marketing strategy for one of its T-Shirts by establishing a Brand Development Department under the supervision of a newly appointed General Manager Operations.

The General Manager Operations and Chief Executive Officer calculated different price and demand relationships as given below:

Price per unit (Rs.)	Demand (Units)	
	GM	CEO
400	60,000	45,000
350	70,000	55,000
300	75,000	58,000

The department was given target to create demand for 55,000 units at a price of Rs. 350 per unit. Accordingly, all other departments prepared their own budget estimates, which were finally compiled by the Finance Department. The target price and volume were quite realistic and according to the prevailing market condition and company's own experience.

The reporting hierarchy is as under:

	Reporting to	Reporting to
Sewing Department	Manager Manufacturing	General Manager Factory
Cutting Department	Manager Manufacturing	General Manager Factory
Machinery Maintenance Department	Manager Manufacturing	General Manager Factory
Stores Department	Manager Manufacturing	General Manager Factory
Sales Department	Manager Sales	General Manager Operations
Brand Development Department	Manager Marketing	General Manager Operations
Purchasing Department	Manager Procurement	General Manager Factory
Recovery Department	Manager Finance	General Manager Operations
Finance Department	Manager Finance	General Manager Operations

Both General Managers report to Chief Executive Officer, who is responsible to the Board of Directors.

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Credit committee is comprised of General Managers and Chief Executive and responsible to Board of Directors.

Accounts Department reported the following figure at the end of second year.

	<b>Budget</b>	<b>Actual</b>
	<b>Rs.</b>	<b>Rs.</b>
Sales	20,350,000	18,315,000
<i>(Budgeted volume 55,000 pieces, actual 49,500)</i>		
Bad debts	508,750	732,600
Cloth used	8,085,000	6,831,000
<i>(Budgeted usage per piece 1.40 Kgs, actual 1.50 Kgs)</i>		
Advertising	1,000,000	1,050,000
<i>(Including Rs.200,000 on advertisement for recruitment)</i>		
Audit fees	25,000	25,000
Credit reports	125,000	135,000
Sales representative's traveling expenses	407,000	335,000
Sales commission	3,052,500	3,296,700
<i>(Normal rate of commission is 15% on sale)</i>		
Cutting labour	275,000	297,000
<i>(Budgeted rate per piece Rs. 5, actual Rs. 6)</i>		
Stitching labour	1,100,000	940,500
<i>(Budgeted rate per piece Rs. 20, actual Rs. 19)</i>		
Factory rent	960,000	960,000
Cloth testing cost (required as per law)	161,700	130,000
Spare parts consumed	120,000	142,000
Yearly machinery maintenance contract as per policy	60,000	60,000
General Manager Factory - office cost	1,500,000	1,680,000
General Manager Operations - office cost	1,620,000	1,440,000
Manager Finance - office expenses	540,000	502,000
Manager Sales - office expenses	660,000	595,000
Manager Marketing - office expenses	900,000	910,000
Manager Procurement - office expenses	300,000	285,000

GM Operations has authority to revise sales price and commission thereon on case to case basis under special circumstances.

**Required:**

Prepare 'Responsibility Accounting Report' containing variances for each reporting hierarchy including a final report to the Board of Directors.

(22)

**(THE END)**