**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF PAKISTAN**

**Final Examinations Winter 2005**

**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:

**Trial Balance**

| | Dr. | Cr. |
|---|---|---|
| | **Rs. in '000'** | |
| 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 |

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:

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

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 |
| | 11,310 |
| Selling and administrative expenses | 1,560 |
| Profit before interest and tax | 9,750 |
| Interest expense | 1,755 |
| Profit before tax | 7,995 |
| Tax | 3,198 |
| Profit after tax | 4,797 |

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

| | **Rs. '000'** |
|---|---|
| **Capital and liabilities** | |
| 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 |
| | 58,500 |

| **Assets** | |
|---|---|
| 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.

**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:

| | *Probability* |
|---|---|
| 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:

| | **Probability of Outcome** | **Unit Sales Volume** | **Sales Price (Rs.)** | **NPV (Rs. 000)** |
|---|---|---|---|---|
| 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)**

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.

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.

| | **Budget Rs.** | **Actual Rs.** |
|---|---|---|
| Sales | 20,350,000 | 18,315,000 |
| *(Budgeted volume 55,000 pieces, actual 49,500)* | | |
| Bad debts | 508,750 | 732,600 |
| Cloth used | 8,085,000 | 6,831,000 |
| *(Budgeted usage per piece 1.40 Kgs, actual 1.50 Kgs)* | | |
| Advertising | 1,000,000 | 1,050,000 |
| *(Including Rs.200,000 on advertisement for recruitment)* | | |
| 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 |
| *(Normal rate of commission is 15% on sale)* | | |
| Cutting labour | 275,000 | 297,000 |
| *(Budgeted rate per piece Rs. 5, actual Rs. 6)* | | |
| Stitching labour | 1,100,000 | 940,500 |
| *(Budgeted rate per piece Rs. 20, actual Rs. 19)* | | |
| 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)**