DEPARTMENT OF MANAGEMENT STUDIES
INDIAN INSTITUTE OF TECHNOLOGY DELHI

MAJOR TEST (II Semester 2006-07)
SML 401: MANAGERIAL ACCOUNTING & FINANCIAL MANAGEMENT

Date: 03rd May 2007 — Venue: MS 702/MS 717
Time: 10:30 AM – 12:30 PM — Max Marks: 40

Note: Answer all questions, but answer to Q 1 should be given separately either in the beginning or at the end.
Make suitable assumption where required, but state them clearly.
Proper working details will be given due weightage.

1. Write notes on the following
   (a) Arbitrage in currency Market
   (b) Estimation of Future Exchange Rate
   (c) PI versus NPV in Capital Budgeting Decisions
   (d) Monetary Measurement Principle
   (e) Principle of Conservation

5 x 3 marks = 15 marks

2. The Soft Flow Inc Ltd's income statement for the preceding year is presented below. Except as noted, the cost/revenue relationship for the coming year is expected to follow the same pattern as in the preceding year. Income statement for the year ending March 31 is as follows.

Sales (20,00,000 bottles @ 25 paise each)		Rs 5,00,000
Variable costs	Rs 3,00,000	
Fixed cost	1,00.000	4.00.000
Pre-tax Profit		1,00,000
Less: Taxes		35.000
Profit after tax		65,000

   (a) What is the break-even point in amount and units?
   (b) Suppose that a plant expansion will add Rs 50,000 to fixed cost and increase capacity by 60 percent. How many bottles would have to be sold after the addition to break-even?
   (c) At what level of sales will the company be able to maintain its present pre-tax position even after expansion?
   (d) The company's management feels that it should earn at least Rs 10,000 (pre-tax per annum) on the new investment. What sales volume is required to enable the company to maintain existing profits and earn the minimum required return on new investment?
   (e) Suppose the plant operates at full capacity after the expansion, what profit will be earned?

7 marks

3. XYZ ltd. has undertaken a new projeet that will continue for next five years. The CFO of the company wants to know how much amount he has to set aside as working capital for the seeond year. For the purpose he has collected the following information:

Cost per unit at full annual capacity of 25000 units,

Material	Rs. 50
Labour and variable expenses	60
Fixcd Expenses:	
Factory overheads	10
Administrative overheads	20
Depreciation	10
Selling priee	250
Opcning stoek of raw material	50000
Opening stoek of finished goods (5000 units)	600000

The selling expenses are expected to be Rs. 15 per unit, 40% being fixed. In the second year budgeted production and sales are 20000 and 22000 units respectively.

To asscss the working capital requirement for the year the following information is given below:

(a) 3-months average consumption is to be held as stock of raw material.
(b) Debtors are expected to be equal to 1-months cost of sales.
(e) Creditors generally extend credit for a period of 2-months on an average.
(d) All the expenses are expected to remain outstanding for a period of 1-month on an average.
(e) Minimum desired cash balance is expected to be Rs. 25000.
(f) Stock of finished goods is taken at average cost.

From the information above determine the amount of working capital for the second year with proper working notes.

10 marks

4. The ABC Ltd invited the XYZ Ltd to submit a design for a crane and also to submit a bid for a contract to produce 10 such cranes. Similar invitations have also been sent to their crane manufacturing companies. The XYZ Ltd has suffered from considerable excess capacity during the past three years and has seen little prospects of improving the situation in the near future. Consequently, it readily responds to the invitation of ABC Ltd and has spent Rs 30,000 on design and eost studies in connection with it. As a result of this exercise, a bid of Rs 4,00,000 per crane has been submitted on the basis of the following budgeted income statement for the period.

(Question 4 continued)

Revenue (10 eranes @ Rs 4,00,000)		Rs 40,00,000
Costs:		
Materials	Rs 15,00,000	
Direct labour	10,00,000	
Variable manufacturing overheads	7,00,000	
Fixed manufacturing overheads	5,00,000	
Freight costs	35,000	
Design and cost studies	30,000	37,65,000
Profit before tax		2,35,000

The ABC Ltd has replied that it prefers the XYZ Ltd design to any of the others submitted but the bid price of Rs 4,00,000 is too high. It has made a counter offer to award the contract to the company at a price of Rs 3,40,000 per crane. Would it be profitable for the XYZ Ltd to accept the contract at the offered price of Rs 3,40,000 per crane? Justify you answer.

8 marks