VPM's
DR VN BRIMS, Thane
Programme: MMS (2014-16)
Second Semester Examination April 2015

Subject	Cost and Management accounting		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages		Date	22-04-2015

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.
Q1) 20 Marks (Compulsory)

Greenwich plc

Topic: Transfer Pricing, Negotiated Transfer Prices, Divisional Autonomy

A mediator has been appointed by the head office of Greenwich plc to agree the purchasing of products X and X100. The original agreement was for the North Division to purchase X and the Essex Division to purchase X100 and the level of purchases to remain the same as the previous year.

The mediator appointed by head office has only recently joined the company and is recently qualified. He has worked for the management accountant at the North Division at another company but does not believe this helped him to get the job. Apparently this is the first time that a manager from head office has been asked to mediate in a dispute between divisions.

Initially the mediator talked to the two purchasing divisions separately. The managers at the North Division gave details of current market prices for product X and argued that Swansea was not lowering its prices in line with other suppliers. North Division also complained about the new profit targets that have been set been set by head office. Managers' were convinced that they must have the freedom to buy and sell outside the company.

The managers at the Essex Division told a similar story. They gave details of how market prices had fluctuated in the last 6 months. Their conclusion was that market prices would continue to fall and therefore the Swansea Division must reduce its prices. Again managers also argued that they must have the freedom to buy and sell outside the company.

Finally a meeting with the Swansea Division was held. The managers did not accept any of the points rose by the two purchasing divisions and argued that the current arrangement had worked well and did not need changing.

After returning to the head office the mediator wrote a short report summarizing the details of the original agreement.

<u>Details of the original agreement</u>

The North Division purchases 3,000 units of product X from Swansea (the supplying division) and another 1,000 units from an external supplier. The market price for product X is Rs900 per unit.

The Essex Division purchases 1,000 units of product X100 from Swansea and another 1,000 units from an external supplier.

<u>Details of the revised agreement</u>

Swansea will continue to produce products X and X100. All of its production will be sold to the North and Essex Divisions. No other customers are likely to found for these products in the short term given that supply is greater than demand in the market.

The mediator carefully considered the issues raised by the managers and suggested the following compromise. He gave all of the divisions 7 days in which to comment.

Swansea will manufacture 2,000 units of X for the North Division and 500 units of product X100 for the Essex Division.

North will buy 2,000 units of X from Swansea and 2,000 units from an external supplier at Rs900 per unit.

Essex will buy 500 units of X100 from Swansea and 1,500 units from an external supplier at Rs1, 900 per unit.

Swansea Division Data 1999

Data based on original agreement

Product	X	X100
Direct materials	Rs200	Rs300
Direct labour	Rs200	Rs300
Variable overhead	Rs300	Rs600
Transfer price	Rs1,000	Rs2,000
Annual Volume	3,000 units	1,000 units

a) Calculate the increase or decrease in profits for the three divisions and the company if the head office agreement is imposed on managers. Discuss the problems faced by mediator in this situation.

b) Evaluate the implications of the following transfer pricing policies:

Transfer price = cost plus a mark-up for the selling division
Transfer price = standard cost plus a mark-up for the selling division.
Transfer price = incremental cost
Transfer price = price negotiated by the managers

Attempt Any FOUR from the Remaining SIX Questions

Q2) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) S. Ltd. furnishes you the following information related to half year ending 3oth June 2010

Fixed expenses	Rs 50,000/-
Sales value	Rs. 2,00,000/-
Profit	Rs. 50,000/-

During the second half of the same year the company has projected a loss of Rs 10000/- Calculate:

1. P/V Ratio, Breakeven Point, and margin of safety for six months ending 30th June 2010.
2. Breakeven point and margin of safety for whole year

b) Explain various methods of costing? What are various techniques of cost accounting? Explain any two techniques.

c) What do you understand by zero based budgeting and explain various types of budget

Q3) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) The direct labour hour requirements of the three of the products manufactured in a factory each involving more than one labour operation, are estimated as follows

Direct Labour hours per unit (in minutes)

Operations	**Product 1**	**Product 2**	**Product 3**
Operation 1	18	42	30
Operation 2	---	12	24
Operation 3	9	6	----

The factory worked 8 hours per days in a week. The budget quarters is taken as 13 weeks and during a quarter lost hours due to leave and holidays and other causes are estimated to be 124 hours. The budgeted hourly rates for the workers manning the operation 1, 2 and 3 are Rs 2, Rs 2.50 and Rs 3 respectively. The budgeted sales for the products during the quarter are

Product 1 - 9000 units,
Product 2 - 15000 units
Product 3 - 12000 units

There is a carryover of 5000 units of product 2 and 4000 units of product 3 and is proposed to built up a stock at the end of the budget quarter as follows.

Product 1 - 1000 units,
Product 3 – 20 00 units

Prepare man power budget for the quarter showing direct labour hours, direct labour cost and number of workers.

b) Prepare cash budget from the following information for the month of May, June and July 2012.

Receipts and payments forecasts:

Months 2012	**Credit Sales Rs**	**Credit Purchases Rs**	**wages**	**Manufacturing expenses**	**Office Expenses**	**Sales Expenses**
Feb	40000	30000	5000	3000	2000	4000
March	50000	40000	6000	2000	1500	6000
April	60000	25000	7000	5000	2200	4000
May	50000	40000	8000	4000	2500	3000
June	40000	20000	6000	3000	2800	4000
July	30000	35000	4000	2000	3000	5000

Cash and bank balance on may 1st 2011 was Rs 17,000.
Plant will be purchased for Rs 12000 in June
Interest to be received in May amounting to Rs 3000
Obsolete machinery will be sold in July and is expected to realize Rs 8000
Repair on building during June is expected to cost Rs 6000
Advanced tax amounting to Rs 4000 will be paid in July
Credit allowed by suppliers in 2 months and credit allowed to customers is 1 month
Lag payment of manufacturing expenses is half month and for office and selling expenses it is 1 month.

c) What do you understand by responsibility accounting? What are features and advantages of responsibility accounting

Q4) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) From the following particulars of manufacturing firms prepare statement of cost

Stock of materials on 1st January 2011	20000
purchases of raw material in January 2011	5,50,000
stock of finished goods on 1st January 2011	25,000
productive wages	250000
finished goods sold	1200000
works overhead charges	75000
office and general expenses	50000
stock of materials on 31st January 2011	70000
stock of finished goods on 31st January 2011	30000

b) Ltd manufactures a single product for which market demand exists for additional quantity. Present sale of Rs 60000/- per month utilizes only 60% capacity of the plant .Sales manager assures that with a reduction of 10% in the price he would be in a position to increase the sale by about 25%to 30%.

The following data are available:

Selling price Rs. I0 per unit.
Variable Cost Rs. 3 per unit.
Semi Variable Cost Rs. 6,000 fixed pius Rs. 0.50 per unit
Fixed Cost Rs. 20,000 at present level estimated to be Rs. 24,000 at 80% output.

You are required to submit the following statements to the board showing:

(1) The operating profits at 6o% 7o% and 8o % levels at current selling price and at proposed selling price.
(2) The percentage increase in the present output which will be required to maintain the present profit margin at .the proposed selling price.

c) Explain the recent trends in cost accounting? What do you understand by activity based accounting?

Q5) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) Explain following terms:
1) PV RATIO 2) BEP 3) Margin of safety 4) Limiting factor

b) Mr. X has Rs. 2, 00,000 investments in his business firm. He wants a 15 per cent return on his money.
From an analysis of recent cost figures, he, finds that his variable cost of operating is 6o per cent of sales, his fixed costs are Rs. 80000 per year. Answer the following questions

(1) What sales volume must be obtained to break even?
(2) What sales volume must be obtained to get 15% cent return on investment?
(3) Mr. X. estimates that even if he closed the doors of his business he would incur Rs 25,000 as expenses per year .As what sales would he be better off by locking his business up.

c) What is transfer pricing? Explain various methods of calculations of transfer pricing

Q6) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) Define Marginal cost and explain advantages and disadvantages of Marginal Costing Technique

b) Explain Difference between Financial accounting, cost and Management Accounting

c) Y company has just been incorporated and plans to produce a product that will sell for Rs 10 per unit .Preliminary market surveys show that the demand will be around 10000units per year
The company has the choice of buying one of two machines, each of which has capacity of 10000 units per year .Machine A would have fixed costs of RS 30000 per year and would yield a profit of Rs 30000/- per year on sale of 10000 units. Machine B would have fixed costs of Rs 18000/-per year and would yield a profit of Rs 22000/- per year on sale of 10000 units
<u>Variable costs behave linearly for both machines required:</u>

(1) Break-even sales for each machine.
(2) Sales level where both machines are equally profitable.

Q7) ***Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks***

a) What do you understand by LIFO, FIFO, methods of inventory costing? Which is more relevant according to IFRS and why?

b) Prepare process account, showing the cost per ton of each product. The Bengal Chemical Corporation Ltd produced three chemicals during the month of July 1975 by three consecutive processes. In each process 2% of the total weight put in is lost and 10% scrap which from process 1 and 2 realizes Rs 100/- a ton and from process 3, Rs 20/- a ton .The product of three processes is dealt with as follows:

Particulars	Process 1		Process 2		Process 3	
Passed to next process		75%		50%		------
Stock kept for sale		25%		50%		100%
Expenses incurred	Rs	Tons	Rs	Tons	Rs	Tons
Raw Materials	120000	1000	28000	140	107840	1348
Manufacturing Wages	20500	-------	18520	--------	15000	------
General Expenses	10300	--------	7240	--------	3100	-------

c) What do you understand by opportunity cost, differential cost, sunk cost and out of pocket cost?