

Transfer Pricing

1. M. Ltd. has two divisions- Division 1 and Division 2. Division 2 can buy from Division 1 or from outside suppliers. Division 1 can sell at the market price all the output that it can produce. The profit statement for the year for the company as a whole appears as follows:

Profit Statement for the year ended December 31

Total Sales	1,80,000
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Cost of goods sold:

Opening Stocks

Manufacturing Costs:

Raw materials	Division 1	40,000	
Labour	Division 1	30,000	
Overhead	Division 1	20,000	
Process Supplier	Division 2	15,000	
Labour	Division 2	20,000	
Overhead	Division 2	<u>10,000</u>	
Cost of goods available for sale		1,35,000	

Deduct Closing Stock at cost

Division 1	-----		
Division 2	<u>10,000</u>		<u>1,45,000</u>
Gross profit			55,000

Operating expenses:

Sales and Admn. Exp.	Division 1	11,000	
Sales and Admn. Exp.	Division 2	12,000	
Head Office overheads		<u>14,000</u>	<u>37,000</u>

Net profit before tax	<u>18,000</u>
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Closing stock of ` 10,000 are valued at the cost of production incurred in Division 1. This stocks are as yet unprocessed. The market value of unprocessed is ` 12,000. The sales for the year can broken down as follows:

Division 1	` 40,000	
Division 2	<u>` 1,40,000</u>	
	<u>` 1,80,000</u>	

The market value of the unprocessed material actually transferred from Division 1 to Division 2 (exclusive of the closing stock) was ` 1,00,000.

Required:

Prepare division profit statement that might be used to evaluate the performance of the two division managers.

2. Division RF is a profit centre which produces three products X, Y and Z. Each product has an external market.

	X	Y	Z
External market price per unit	` 48	` 46	` 40

c) At 100% capacity utilisation of the Basic unit at the market price and transfer price to the Processing unit of ` 360 per tonne.

d) Comment on the effect of the company transfer pricing policy on the profitability of the Processing Unit.

4. CTD Ltd. has two divisions—FD and TM. FD is an iron foundry division which produces moulding that have a limited external market and are also transferred to TM division. TM division uses the moulding to produce a piece of agricultural equipment called the “TX” which is sold externally. Each TX requires one moulding. Both divisions produce only one type of product.

The performance of each Divisional Manager is evaluated individually on the basis of the residual income (RI) of his or her division. The company’s average annual 12% cost of capital is used to calculate the finance charges. If their own target residual income is achieved, each Division Manager is awarded a bonus equal to 5% of his or her residual income. All bonuses are paid out of Head Office profits.

The following budgeted information is available for the forthcoming year :

	TM division TX per unit	FD division Moulding per unit
External selling price	500	80
Variable product cost	366*	40
Fixed production overheads	<u>60</u>	<u>20</u>
Gross profit	74	20
Variable selling and distribution cost	25	4 **
Fixed administration overhead	<u>25</u>	<u>4</u>
Net profit	<u>24</u>	<u>12</u>
Normal capacity (units)	15,000	20,000
Maximum production capacity (units)	15,000	25,000
Sales to external customers (units)	15,000	5,000
Capital employed	Rs.1,500,000	Rs.750,000
Target RI	Rs. 105,000	Rs. 85,000

*The variable production cost of TX includes the cost of an FD moulding.

** External sales only of the moulding incur a variable selling and distribution cost Rs.4 per unit.

FD division currently transfer 15,000 moulding to TM division at a transfer price equal to the total production cost plus 10%, Fixed cost are absorbed on the basis of normal capacity.

- (a) Calculate the bonus each Divisional Manager would receive under the current transfer pricing policy and discuss any implications that the current performance evaluation system may have for each division and for the company as a whole.
- (b) Both Divisional Managers want to achieve their respective residual income targets. Based on the budgeted figures, calculate
- The max. transfer price per unit that the Divisional Manager of TM division would pay.
 - The minimum transfer price p.u. that the Divisional Manager of FD would accept.

5. A company is organized on decentralized lines, .with each manufacturing division operating as a separate profit centre. Each division manager has full authority to decide on sale of division's output to outsiders or to other divisions. Division AB manufactures a single standardized product. Some output is sold externally and remaining is transferred to division XY where it is a subassembly in the manufacture of the division product. The unit cost of division AB product and division XY is as follows:

	Division AB (₹)	Division XY (₹)
Transfer from division AB to XY	--	42.00
Direct Material	6.00	35.00
Direct Labour	3.00	4.50
Direct expenses	3.00	--
Variable manufacturing overheads	3.00	18.00
Fixed manufacturing overheads	6.00	18.00
Variable selling and packing expenses	3.00	2.50
	24.00	120.00

Division AB sold 40,000 units annually at the standard price of ₹45 in external market. In additions to the external sales, 10,000 units are transferred annually to division XY at internal price of Rupees 42 per unit. Variable selling and packing expenses are not incurred by supplying division- for the internal transfer of the product. Division XY incorporates the transferred goods into more advance product. The manager of division XY disagrees with the basis used to set the transfer price. He argues that transfer price should be made at variable cost since he claims that his division is taking output that division AB should be unable to sell at price ₹45.

He also submitted a report of the relationship between selling price and demand to support of his disagreement. The report of customer demand at various selling prices for division AB and for division XY is as follows:

Division AB			
Selling price per unit (₹)	30	45	60
Demand (Units)	60,000	40,000	20,000
Division XY			
Selling price per unit (₹)	120	135	150
Demand (Units)	15,000	10,000	5,000

The company has sufficient capacity to meet demand at various selling prices. Internal transfer demanded units will be decided by XY division.

Required:

- (i) To calculate divisional profitability and overall profitability of company if division AB transfers demanded units to XY at price of ₹42.
- (ii) To calculate divisional profitability and overall profitability of company if division AB transfers demanded units to XY at variable cost.
- (i) In place of internal transfers, AB division can sell 10,000 units of their product in new external market without effecting existing market, at price ₹32 per unit and XY division can purchase these units at the rate of ₹31 in open market. Calculate company's profit by following above strategies.