

※注意：請按順序作答

一、 問答題 (共 24 分，每題 6 分)

1. 舉例說明如何利用非財務資訊，從品質與時間面來衡量生產流程的績效。
2. 舉例說明企業組織內管理階層如何以減少反功能行為 (dysfunctional behavior) 來達成目標一致 (goal congruence)。
3. 企業內部如何執行 TQM 與持續改善的工作？
4. 說明影響公司訂價決策的因素。

二、 計算題 (五題，共 76 分)

1. Europa, Inc., has two divisions, A and B. Division A produces the bicycle frame, and Division B assembles the rest of the bicycle onto the frame. There is a market for both. Each division has been designated as a profit center. The transfer price for the subassembly has been set at the long-run average market price. The following data are available to each division:

Estimated selling price for final product	\$ 280
Long-run average selling price for intermediate product	180
Incremental costs for completion in Division B	130
Incremental costs in Division A	110

The manager of Division B has made the following calculation :

Selling price for final product	\$ 280
Transferred-in cost (market)	\$ 180
Incremental cost for completion	<u>130</u> 310
Contribution (loss) on product	<u>\$ (30)</u>

REQUIRED : (14 分)

- (1) Should transfers be made to Division B if there is no excess capacity in Division A?
  - (2) Assume that Division A's maximum capacity for this product is 1,000 units per month and sales to the intermediate market are now 800 units. Should 200 units be transferred to Division B? At what transfer price?
2. Lake Clinic is considering investing in new heart monitoring equipment. It has two options : Option A would have an initial lower cost but would require a significant expenditure for rebuilding after 4 years. Option B would require no rebuilding expenditure, but its maintenance costs would be higher. Since the option B machine is of initial higher quality, it is expected to have a salvage value at the end of its

useful life. The following estimates were made of the cash flows :

	<u>Option A</u>	<u>Option B</u>
Initial cost	\$ 110,000	\$ 200,000
Annual cash inflows	\$ 70,000	\$ 70,000
Annual cash outflows	\$ 39,200	\$ 30,000
Cost to rebuild (end of year 4)	\$ 50,000	\$ 0
Salvage value	0	10,000
Estimated useful life	8	8

The company's cost of capital is 8% . Table values are :

Present Value of \$ 1 for 4 periods at 8%	0.735
Present Value of \$ 1 for 8 periods at 8%	0.540
Present Value of \$ annuity for 4 periods at 8%	3.312
Present Value of \$ annuity for 8 periods at 8%	5.745

**REQUIRED :** ( 16 分 )

- ( 1 ) Compute the (a) net present value, (b) profitability index for each option.
- ( 2 ) Which option should be accepted ?

3. Lisa, a recent graduate of Rolling's accounting program, evaluated the operating performance of Winser Company's four divisions. Lisa made the following presentation to Winser's Board of Directors and suggested the H Division be eliminated. "If the H division is eliminated," she said, "our total profits would increase by \$ 16,870."

	<u>The Other Three Divisions</u>	<u>H Division</u>	<u>Total</u>
Sales	\$ 1,664,200	\$98,200	\$1,762,400
Cost of goods sold	<u>978,520</u>	<u>76,470</u>	<u>1,054,990</u>
Gross profit	685,680	21,730	707,410
Operating expenses	<u>527,940</u>	<u>38,600</u>	<u>566,540</u>
Net income	<u>\$ 157,740</u>	<u>\$(16,870)</u>	<u>\$ 140,870</u>

In the H Division, cost of goods sold is \$ 60,000 variable and \$ 16,470 fixed, and operating expenses are \$ 12,000 variable and \$ 24,600 fixed. None of the H Division's fixed costs will be eliminated if the division is discontinued.

**REQUIRED :** ( 12 分 )

Is Lisa right about eliminating the H Division? Prepare a schedule to support your answer.

4. Baron Company incurs the following annual costs in producing 25,000 ignition switches for motor scooters :

Direct materials	\$ 50,000
Direct labor	75,000
Variable manufacturing overhead	40,000
Fixed manufacturing overhead	<u>60,000</u>
Total manufacturing costs	<u>\$225,000</u>

Alternatively, Baron Company may purchase the ignition switches from Ignition, Inc., at a price of \$ 8 per unit. If the ignition switches are purchased from Ignition, Inc., only \$ 10, 000 of its fixed manufacturing costs will be eliminated.

**REQUIRED :** ( 14 分 )

- ( 1 ) What should management do ?
  - ( 2 ) Assume that through buying the switches, Baron Company can use the released productive capacity to generate additional income of \$ 30,000 producing a different product. Should Baron Company buy the switches ?
5. B Corporation manufactures and sells television sets. It uses an actual costing system, in which unit costs are calculated on a monthly basis. Data relating to January and February of 2002 are :

	January	February
Unit data		
Beginning inventory	0	300
Production	1,000	800
Sales	700	800
Variable-cost data		
Manufacturing costs per unit produced	\$90	\$90
Marketing costs per unit sold	60	60
Fixed-cost data		
Manufacturing costs	\$ 40,000	\$ 40,000
Marketing costs	14,000	14,000

The selling price per unit is \$250

**REQUIRED :** ( 20 分 )

- ( 1 ) Present income statements for B in January and February of 2002 under (a) variable costing, and (b) absorption costing.
- ( 2 ) Explain any differences between (a) and (b).