

※ 務必按照順序作答，作答時請標明題號，題目共四大題

1. 簡答題 (請按順序作答，本大題有 5 小題，共 30 分)

- (1.) 會計控制(Accounting Control) 與管理控制(Management Control) 的目的是什麼？請就你學過的成本及管理會計學中，舉例 (各舉二例以上) 說明為達到目的所採用的方法。
- (2.) 如果高管理階層其年薪(Total Earnings)，完全以當年度的績效好壞來決定，而不給予基本底薪，你認為這種制度能否更具激勵作用？若台灣的教學醫院臨床醫師的薪資，採取這種制度，其最大的缺點是什麼？
- (3.) 在存貨管理中 $\text{Relevant Total Costs} = \text{Purchasing Costs} + \text{Ordering Costs} + \text{Carrying Costs} + \text{Shortage Costs} + \text{Quality Costs}$
 請簡單說明上述等式各種不同 Vision 的假設。
- (4.) 舉例說明 Expected Value of Perfect Information (EVPI) 是什麼？
- (5.) 用 **Balanced Scorecard** 來衡量組織的績效，有四個 Key Perspectives 【1】 Financial 【2】 Customer 【3】 Internal Business Process 及 【4】 Learning and Growth 請簡單舉例說明之，又，實施 **Balanced Scorecard** 應注意哪些事項？

2. 計算題 (請按順序作答，本大題有 7 小題，共 39 分)

(1.) Lincoln Company, a glove manufacturer, has enough idle capacity available to accept a special order of 20,000 pairs of gloves at \$12.00 a pair. The normal selling price is \$20.00 a pair. Variable manufacturing costs are \$9.00 a pair, and fixed manufacturing costs are \$3.00 a pair. Lincoln will not incur any selling expenses as a result of the special order. What would be the effect on operating income if the special order could be accepted without affecting normal sales? (5 分)

(2.) Light Company has 2,000 obsolete light fixtures that are carried in inventory at a manufacturing cost of \$30,000. If the fixtures are reworked for \$10,000, they could be sold for \$18,000. Alternately, the light fixtures could be sold for \$3,000 to a jobber located in a distant city. In a decision model analyzing these alternatives, the opportunity cost would be? (5 分)

(3.) Pole Co. is investing in a machine with a 3-year life. The machine is expected to reduce annual cash operating costs by \$30,000 in each of the first 2 years and by \$20,000 in year 3. Present values of an annuity of \$1 at 14% are: Period 1 (0.88), Period 2 (1.65), Period 3 (2.32)
 Using a 14% cost of capital, what is the present value of these future savings? (5 分)

(4.) Oslo Co.'s industrial photo-finishing division, Rho, incurred the following costs and expenses in 1997:

	Variable	Fixed
Direct materials	\$200,000	
Direct photo-finishing labor	150,000	
Factory overhead	70,000	\$42,000
General, selling, and administrative	30,000	48,000
Totals	\$450,000	\$90,000

During 1997, Rho produced 300,000 units of industrial photo-prints, which were sold for \$2.00 each. Oslo's investment in Rho was \$500,000 and \$700,000 at January 1, 1997, and December 31, 1997, respectively. Oslo normally imputes interest on investments at 15% of average invested capital. How many industrial photo-print units did Rho have to sell in 1997 to break even? (6 分)

(5.) Selected information concerning the operations of Kern Company for the year ended December 31, 1997, is available as follows:

Units produced	10,000
Units sold	9,000
Direct materials used	\$40,000
Direct manufacturing labor incurred	\$20,000
Fixed factory overhead	\$25,000
Variable factory overhead	\$12,000
Fixed selling and admin. Expenses	\$30,000
Variable selling and admin. Expenses	\$ 4,500
Finished goods inventory, January 1, 1997	none

There were no work in process inventories at the beginning and end of 1997. Which costing method, absorption or variable costing, would show a higher operating income for 1997 and by what amount? (6分)

(6.) Bowie Inc., A manufacturer of earrings, has accumulated the following cost information for products A and B:

	A	B	Total
Production volume	500	1000	
Engineering costs incurred	\$2,000	\$3,000	\$5,000
Engineering costs per batch	\$800	\$1,500	
Batch size	200	500	
Total direct manufacturing labor hours	750	1,400	2,150
Direct manufacturing labor hours/unit	1.5	1.4	

Assuming activity-based costing (ABC) is used, what is the engineering cost per unit for products A and B? (6分)

(7.) Ajax Division of Carlyle Corporation produces electric motors, 20% of which are sold to Bradley Division of Carlyle and the remainder to outside customers. Carlyle treats its divisions as profit centers and allows division managers to choose their sources of sale and supply. Corporate policy requires that all interdivisional sales and purchases be recorded at variable cost as a transfer price. Ajax Division's estimated sales and standard cost data for the year ending December 31, 1996, based on the full capacity of 100,000 units, are as follows:

	<u>Bradley</u>	<u>Outsiders</u>
Sales	\$ 900,000	\$ 8,000,000
Variable costs	(900,000)	(3,600,000)
Fixed costs	(300,000)	(1,200,000)
Gross margin	<u>\$ (300,000)</u>	<u>\$ 3,200,000</u>
Unit sales	20,000	80,000

Carlyle is considering permitting the division managers to negotiate the transfer price for 1997. The managers agreed on a tentative transfer price of \$75 per unit, to be reduced based on an equal sharing of the additional gross margin to Ajax resulting from sales to Bradley at \$75 per unit instead of at variable cost. To evaluate this proposal, Carlyle would like to compare it with current policy based on 1996 results. Under the proposed action, the actual transfer price for 1996 sales of 20,000 motors would have been? (6分)

3. 願環公司採傳統標準成本制，90年3月份差異分析資料如下：

* 材料購買價格差異	\$ 5,000 (不利)
* 材料用量差異	\$ 1,500 (有利)
* 材料 Inventory Variance	\$ 9,500 (不利)
* 直接人工工資差異	\$ 16,040 (有利)
* 直接人工效率差異	\$ 16,500 (不利)
* 製造費用 Production-volume 差異	\$ 8,000 (不利)
* 製造費用 Efficiency 差異	\$ 6,600 (不利)
* 製造費用 Spending 差異	\$ 39,400 (不利)

已知3月份實際生產7,800單位，銷售7,500台，3月1日無製成品存貨，投入直接人工時間40,100小時，實際工資@\$14.6，實際購料25,000單位，領料23,100單位，購價@\$5.2，標準產能8,000台，標準投入人工時間為40,000小時，實際製造費用\$600,000。

試根據上述資料計算：

- (1.) 每一完成品之標準材料、標準人工及標準製造費用各多少？
- (2.) 假設差異全部轉入銷貨成本，三月份之淨利為\$X，若願環公司改採直接成本法(Direct Costing)請計算三月份之淨利應為多少？ (15分)

4. The Cooking Department of Spicer, Inc., uses a process-costing system. Direct materials are added at the beginning of the cooking process. Conversion costs are added evenly during the cooking process. Consider the following data for the Cooking Department of Spicer, Inc., for the month of January:

	Physical Units	Direct Materials	Conversion Costs
Work in process, January 1 (Conversion costs 25%)	10,000	\$220,000	\$30,000
Started in January	74,000		
Good units completed and transferred out during January	61,000		
Spoiled units	8,000		
Work in process, January 31 (Conversion costs ?%)	15,000		
Costs added during January		\$1,480,000	\$942,000
Cost per equivalent unit of work done in January		\$20	\$12

Spicer uses the FIFO method of process costing. Inspection occurs when production is 100% complete. Normal spoilage is 11% of good units completed and transferred out during the current period.

REQUIRED: (單位成本請計算到小數點第四位，第五位四捨五入)

- (1) Compute the total cost transferred to finished goods and work in process (Ending inventory).
- (2) Assuming the Spicer Inc., Uses a process cost system with average method to account for its Production, compute the total cost transferred to finished goods.
- (3) Assuming the inspection occurs when production is 50% complete and Spicer uses the FIFO method of processing costing compute the cost of normal spoilage. (16分)