



1. (10 分)雲林科技公司現有的舊機器已經使用三年，正考慮兩種選擇：(1)繼續使用舊機器或(2)於 X8 年 1 月初購買一部新機器並出售舊機器。該公司預計於未來四年每年均銷售 200,000 單位的產品，每單位售價 \$0.5。其他相關資料如下：

	舊機器	新機器
取得成本	\$80,000	\$120,000
殘值	\$10,000	\$20,000
耐用年限—自取得日起	7 年	4 年
預計每年現金營業支出		
每單位變動成本	\$0.2	\$0.08
總固定成本	\$7,500	\$6,500
折舊方法	直線法	年數合計法
預計機器現金價值		
X8 年初	\$40,000	\$120,000
X11 年底	10,000	20,000

假設各年的現金流量(營業收入、費用及所得稅)均於各年底發生，該公司適用稅率為 40%，最低要求報酬率為 15%。

試作：使用淨現值法評估該公司之決策。

15%複利現值表

期別	1	2	3	4
現值因子	0.870	0.756	0.658	0.572

2. (16 分)斗六公司產銷電腦，該公司推出三種產品：基本型電腦、手提電腦及超級電腦。X8 年預計與實際銷售資料如下：

產品種類	預計				實際			
	單位售價	單位變動成本	銷售量	市場總需求	單位售價	單位變動成本	銷售量	市場總需求
基本	\$12	\$6	500	50,000	\$12.5	\$5.5	660	55,000
手提	20	12	300	20,000	22	13	165	16,500
超級	30	16	200	40,000	28	18	275	33,000
合計			1,000	110,000			1,100	104,500

試作：(1)計算邊際貢獻價格差異，並將其區分為售價差異與變動成本差異。(6 分)

(2)計算邊際貢獻數量差異，並將其區分為銷售組合差異與純粹數量差異。(6 分)

(3)計算市場需求差異與市場佔有率差異。(4 分)



3. (15 分)古坑公司有甲、乙兩部門，甲部門生產主機板，乙部門則組裝電腦。目前乙部門每年向外購買 50,000 個主機板，價格每個\$790，現乙部門有意向甲部門購買主機板，甲部門生產之主機板相關資料如下：

單位售價	\$820
單位變動成本	720
單位固定成本(係以正常產能 500,000 個為基礎)	50

- 試問：(1) 甲部門目前產銷量為 400,000 個，則移轉價格應如何訂定？(3 分)  
 (2) 甲部門已無閒置產能，則移轉價格應如何訂定？(4 分)  
 (3) 同(2)，但因內部轉撥可節省變動成本\$110，則移轉價格應如何訂定？(3 分)  
 (4) 同(2)，但由於乙部門要求之主機板規格特殊，甲部門需將目前可生產原主機板 500,000 個之產能降為 420,000 個，才能再生產乙部門之所需，且此規格特殊之主機板單位變動成本為\$600，則移轉價格應如何設定？(5 分)  
 (注意：每一小題均須分別寫出甲、乙部門可接受之最高或最低移轉價格)

4. (9 分)西螺公司為分權組織，下轄數個自動化部門。部門經理人的績效是以部門投資報酬率(ROI)的高低加以衡量。該公司包裝部門 X8 年度營業損益預算如下：

銷貨收入	\$5,200,000
減：變動成本	<u>3,200,000</u>
邊際貢獻	\$2,000,000
減：固定成本	<u>1,200,000</u>
營業淨利	<u>\$ 800,000</u>

該部門目前的營運資產為\$4,000,000，X8 年度該部門預計以\$500,000 投資一新生產線，該生產線將會帶來\$1,500,000 的營業收入，同時也將發生\$525,000 的固定費用。預計新產品的變動成本是售價的 60%。

- 試作：(1) 投資新生產線的投資報酬率為何？經理人是否會據以接受新生產線的投資？請以計算的結果解釋。(5 分)  
 (2) 如果該公司要求的投資報酬率是 10%，並以剩餘利潤作為衡量部門經理人績效的標準，則是否會激勵經理人接受新生產線的投資？(4 分)



## 5. (12 分) 每題 4 分

Urban intends to sell his customers a special round-trip airline ticket package. He is able to purchase the package from the airline carrier for \$150 each. The round-trip tickets will be sold for \$250 each and the airline intends to reimburse Urban for any unsold ticket packages. Fixed costs include \$5,000 in advertising costs.

- (1) What is the contribution margin per ticket package?
- (2) How many ticket packages will Urban need to sell to break even?
- (3) How many ticket packages will Urban need to sell in order to achieve \$60,000 of operating income?

## 6. (12 分) 每題 3 分

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

Answer the following questions using the information below:

Yun Corporation has two departments, Car Rental and Truck Rental. Central costs may be allocated to the two departments in various ways.

	<u>Car Rental</u>	<u>Truck Rental</u>
Number of Vehicles in fleet	850	430
Number of employees	120	80
Sales	\$120,000	\$30,000

- 1) If administrative expense of \$62,500 is allocated on the basis of number of employees, the cost per cost driver rate would be \_\_\_\_\_.  
A) \$312.50 B) \$572.50 C) \$500.00 D) \$833.33
- 2) If administrative expense of \$77,500 is allocated on the basis of number of employees, the amount allocated to the Car Rental Department would be \_\_\_\_\_.  
A) \$48,437 B) \$47,387 C) \$49,247 D) \$46,500
- 3) If advertising expense of \$125,000 is allocated on the basis of sales, the amount allocated to the Car Rental Department would be \_\_\_\_\_.  
A) \$120,000 B) \$83,333 C) \$86,666 D) \$100,000
- 4) If advertising expense of \$112,500 is allocated on the basis of sales, the cost per cost driver rate would be \_\_\_\_\_.  
A) \$0.33 B) \$0.53 C) \$0.75 D) \$0.83

## 7. (16 分) 每題 4 分

Happy Corporation manufactured 90,000 buckets during February. The variable overhead cost-allocation base is \$5.05 per machine-hour. The following variable overhead data pertain to February:

	<u>Actual</u>	<u>Budgeted</u>
Production	90,000 units	90,000 units
Machine-hours	9,800 hours	9,000 hours
Variable overhead cost per machine-hour	\$5.00	\$4.90

- 1) What is the actual variable overhead cost? \_\_\_\_\_
- 2) What is the flexible-budget amount? \_\_\_\_\_
- 3) What is the variable overhead spending variance? \_\_\_\_\_
- 4) What is the variable overhead efficiency variance? \_\_\_\_\_



8. (10 分) 每題 2 分

Choose the one alternative that best completes the statement or answers the question.

1) Which of the following statements best define a product differentiation strategy?

A) It is an organization's ability to offer products or services its customers perceive to be superior and unique relative to the products or services of its competitors.

B) It describes how an organization can decrease product prices by differentiating its' raw materials from its competitors.

C) It describes how an organization can increase customer base by differentiating its' product prices from its competitors.

D) It is an organization's ability to achieve lower costs relative to competitors through productivity and efficiency improvements, elimination of waste, and tight cost control.

2) \_\_\_\_\_ is the fundamental rethinking and redesign of business processes to achieve improvements in critical measures of performance such as cost, quality, service, speed, and customer satisfaction.

A) Product designing      B) Strategy      C) Reengineering      D) Product differentiation

3) \_\_\_\_\_ translates an organization's mission and strategy into a comprehensive set of performance measures that provide the framework for implementing its strategy.

A) product differentiation      B) differential report      C) balanced scorecard      D) performance scoreboard

4) A \_\_\_\_\_ is a diagram that describes how an organization creates value by connecting strategic objectives in explicit cause-and-effect relationships with each other in the balanced scorecard perspectives.

A) strategic scorecard      B) balanced scoreboard      C) value diagram      D) strategy map

5) Which of the following statements best relates to the balanced scorecard's internal business processes perspective?

A) How do we lower costs?      B) How can we obtain greater profits?      C) How do we motivate employees?

D) How processes will increase value to customers?