

# 淡江大學 101 學年度碩士班招生考試試題

50-1

系別：會計學系

科目：成本與管理會計

考試日期：2月26日(星期日) 第2節

本試題共 四 大題， 4 頁

注意：

1. 所有需要計算的答案均須列示計算過程，否則不予計分；計算過程採四捨五入至小數點後第二位數字。
2. 第1大題之答案，請依其所列示格式進行作答，否則不予計分

本試題雙面印刷

## 1. Multiple Choice (@8%, Sum 40%)

Use the following format to answer, and express the necessary calculation.

Question No.	1-1	1-2	1-3	1-4	1-5
Answer					
Calculating Process					

1-1 Outputs with a negative sales value in the joint production process are:

- A) added to cost of goods sold
- B) added to joint production costs and allocated to joint or main products
- C) added to joint production costs and allocated to byproducts and scrap
- D) subtracted from product revenue

1-2 The Wood Furniture company produces a specialty wood furniture product, and has the following information available concerning its inventory items:

Relevant ordering costs per purchase order	\$300
Relevant carrying costs per year:	
Required annual return on investment	10%
Required other costs per year	\$2.80

Annual demand is 20,000 packages per year. The purchase price per package is \$32. What are the relevant total costs at the economic order quantity?

- A) \$1,414.21
- B) \$4,242.65
- C) \$8,485.28
- D) \$9,000.00

1-3 ACC Company provides the following ABC costing information:

<u>Activities</u>	<u>Total Costs</u>	<u>Activity-cost drivers</u>
Account inquiry hours	\$400,000	10,000 hours
Account billing lines	\$280,000	4,000,000 lines
Account verification accounts	\$150,000	40,000 accounts
Correspondence letters	\$ 50,000	4,000 letters
Total costs	<u>\$880,000</u>	

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The above activities are used by Department A as follows:

	<u>Department A</u>
Account inquiry hours	5,000 hours
Account billing lines	200,000 lines
Account verification accounts	8,000 accounts
Correspondence letters	1,600 letters

How much of the total costs will be assigned to Department A?

- A) \$158,000                      B) \$224,000  
C) \$264,000                      D) \$880,000

1-4 Peggy's Pillows produces and sells a decorative pillow for \$80.00 per unit. In the first month of operation, 2,000 units were produced and 1,800 units were sold. Actual fixed costs are the same as the amount budgeted for the month. Other information for the month includes:

Variable manufacturing costs	\$20.00 per unit
Variable marketing costs	\$ 3.00 per unit
Fixed manufacturing costs	\$ 7.00 per unit
Administrative expenses, all fixed	\$15.00 per unit

Ending inventories:

Direct materials	-0-
WIP	-0-
Finished goods	200 units

What is contribution margin using variable costing?

- A) \$96,250                      B) \$91,000  
C) \$102,600                      D) \$110,000

1-5 As part of his job as cost analyst, MT Company collected the following information concerning the operations of the Machining Department:

	<u>Machine -hours</u>	<u>Total Operating Costs</u>
January	4,000	\$45,000
February	4,600	49,500
March	3,800	45,750
April	4,400	48,000
May	4,500	49,800

Use the high-low method to determine the estimating cost function with machine-hours as the cost driver. If June's estimated machine-hours total 4,200, what are the total estimated costs of the Machining Department?

- A) \$45,625                      B) \$46,625  
C) \$47,625                      D) \$48,625

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2. The Mill Flow Company has two divisions. The Cutting Division prepares timber at its sawmills. The Assembly Division prepares the cut lumber into finished wood for the furniture industry. The timber can be sold separately for \$5.00. The finished wood sell for \$6.00. The information related to manufacturing for the most recent year is as follows:

Cutting Division manufacturing costs	\$6,000,000
Sales of timber by Cutting Division	4,000,000
Market value of timber transferred to Assembly	6,000,000
Sales of finished wood by Assembly Division	7,000,000
Additional manufacturing costs of Assembly Division	1,500,000

**Required:**

Compute the operating income for each division and the company as a whole. Use market value as the transfer price. Are all managers happy with this concept? Explain. (15%)

3. Taiwan, Inc., produces two modular types of plastic chairs, one for the residential market, and the other for the office market. To manufacture a batch of the chairs, Taiwan, Inc., must set up the machines and molds. A separate Setup Department is responsible for setting up machines and molds for different styles of chair. Setup overhead costs consist of some costs that are variable and some costs that are fixed with respect to the number of setup-hours. Budgeted and actual operating data for 2010 are:

The following information pertains to 2011:

	<u>Actual</u> <u>Amounts</u>	<u>Static-budget</u> <u>Amounts</u>
Units produced and sold	15,000	11,250
Batch size (number of units per batch)	250	225
Setup-hours per batch	5	5.25
Variable overhead cost per setup-hour	\$40	\$38
Total fixed setup overhead costs	\$12,000	\$9,975

<u>Static Budget</u>	<u>Residential</u>	<u>Office</u>	<u>Total</u>
Number of chairs sold	1 0,000	1,250	11,250
Contribution margin	\$260,000	\$1 10,000	\$370,000
<u>Actual Results</u>	<u>Residential</u>	<u>Office</u>	<u>Total</u>
Number of chairs sold	12,000	3,000	15,000
Contribution margin	\$220,000	\$132,000	\$352,000

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5-4

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Prior to the beginning of the year, an office products research firm estimated the industry volume for residential and office chairs of the type sold by The Chair Company to be 225,000 chairs. Actual industry volume for the year 2010 was only 300,000 chairs.

**Required:**

Compute the following variances in terms of contribution margin.

- Calculate the efficiency variance for variable setup overhead costs.
- Calculate the production-volume variance for fixed setup overhead costs.
- Calculate the total sales-volume variance.
- Calculate the market-share variance and market-size variance.
- Why would a manager want to calculate cost and revenue variances simultaneously?

(25%)

4. TKU Company supplies cars to corporate clients. TKU has two sources of funds: long term debt with a market and book value of \$32 million issued at an interest rate of 12%, and equity capital that has a market value of \$18 million (book value of \$8 million). The cost of equity capital for TKU is 15%, and its tax rate is 30%. TKU has profit centers in four divisions that operate autonomously. The company's results for 2011 are as follows:

Divisions	Operating Income	Assets	Current Liabilities
Taipei (TP)	\$1,750,000	\$11,500,000	\$2,500,000
New Taipei (NT)	2,400,000	9,000,000	3,500,000
Tainan (TA)	4,675,000	27,500,000	9,500,000
Kao-hsiung (KH)	4,200,000	25,000,000	8,000,000

**Required:**

- Compute TKU's weighted average cost of capital.
- Compute each division's Economic Value Added.
- Rank the divisions by EVA.