

# 國立中央大學 107 學年度碩士班考試入學試題

所別： 企業管理學系 碩士班 一般己組(一般生)

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科目： 管理會計學

本科考試可使用計算器，廠牌、功能不拘

\*請在答案卷(卡)內作答

- [注意] 1.可不按題號順序作答，但須標明題號。  
2.可用中文或英文作答。  
3.計算題請列出必要之計算式，否則不予計分。

一、 The following information is available for ABC Manufacturing Company for 2017:

Inventories	January 1	December 31
Materials	\$ 85,000	\$105,000
Work in process	120,000	105,000
Finished goods	125,000	110,000
Advertising expense		\$ 75,000
Depreciation expense—Office equipment		25,000
Depreciation expense—Factory equipment		16,000
Direct labor		205,000
Heat, light, and power—Factory		6,500
Indirect labor		26,000
Materials purchased during 2008		135,000
Office salaries expense		85,000
Property taxes—Factory		4,500
Property taxes—Headquarters building		15,000
Rent expense—Factory		7,500
Sales		950,000
Sales salaries expense		150,000
Supplies—Factory		3,500
Miscellaneous cost—Factory		4,500

Required: (24%)

Compute the following items for the year:

1. Cost of materials used in production. (4%)
2. Total manufacturing costs incurred during the year. (4%)
3. Cost of good manufactured. (4%)
4. Cost of goods sold. (4%)
5. Gross profit. (4%)
6. Net income. (4%)

參考用

二、 The budget director of Soft Furniture Company requests estimates of sales, production, and other operating data from the various administrative units every month. Selected information concerning sales and production for May 2017 is summarized as follows:

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a. Estimated sales of King and Prince chairs for May by sales territory:

Northern Domestic:	
King .....	5,800 units at \$650 per unit
Prince .....	6,700 units at \$420 per unit
Southern Domestic:	
King .....	3,500 units at \$590 per unit
Prince .....	3,800 units at \$480 per unit
International:	
King .....	1,200 units at \$700 per unit
Prince .....	1,000 units at \$530 per unit

b. Estimated inventories at May 1:

Direct materials:		Finished products:	
Fabric .....	5,000 sq. yds.	King .....	920 units
Wood .....	6,500 lineal ft.	Prince .....	260 units
Filler .....	3,000 cu. ft.		
Springs .....	7,250 units		

c. Desired inventories at May 31:

Direct materials:		Finished products:	
Fabric .....	4,400 sq. yds.	King .....	800 units
Wood .....	5,800 lineal ft.	Prince .....	400 units
Filler .....	3,100 cu. ft.		
Springs .....	7,500 units		

d. Direct materials used in production:

In manufacture of King:	
Fabric .....	4.6 sq. yds. per unit of product
Wood .....	35 lineal ft. per unit of product
Filler .....	3.8 cu. ft. per unit of product
Springs .....	14 units per unit of product
In manufacture of Prince:	
Fabric .....	3 sq. yds. per unit of product
Wood .....	25 lineal ft. per unit of product
Filler .....	3.2 cu. ft. per unit of product
Springs .....	10 units per unit of product

e. Anticipated purchase price for direct materials:

Fabric .....	\$8.00 per square yard	Filler .....	\$3.50 per cubic foot
Wood .....	7.00 per lineal foot	Springs .....	4.50 per unit

f. Direct labor requirements:

King:	
Framing Department .....	2.5 hours at \$12 per hour
Cutting Department .....	1.5 hours at \$9 per hour
Upholstery Department .....	2.0 hours at \$15 per hour
Prince:	
Framing Department .....	1.8 hours at \$12 per hour
Cutting Department .....	0.5 hour at \$9 per hour
Upholstery Department .....	2.3 hours at \$15 per hour

Required: (24%)

Compute the following estimates in the company's budget for May 2017:

1. The sale revenues for King and Prince chairs and the total sale revenue for the company. (6%)
2. Total units to be produced for King and Prince chairs. (4%)
3. The costs of total direct materials to be purchased for Fabric, Wood, Filler, and Springs. (8%)
4. Total direct labor costs for Framing, Cutting, and Upholstery Department. (6%)



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- 三、 Chilczuk, S.A., of Gdansk, Poland, is a major producer of classic Polish sausage. The company uses a standard cost system to help control costs. Manufacturing overhead is applied to production on the basis of standard direct labor-hours. According to the company's flexible budget, the following manufacturing overhead costs should be incurred at an activity level of 35,000 labor-hours (the denominator activity level):

Variable manufacturing overhead cost .....	PZ 87,500
Fixed manufacturing overhead cost .....	210,000
Total manufacturing overhead cost .....	<u>PZ297,500</u>

The currency in Poland is the zloty, which is denoted here by PZ.

During the most recent year, the following operating results were recorded:

Activity:

Actual labor-hours worked .....	30,000
Standard labor-hours allowed for output .....	32,000

Cost:

Actual variable manufacturing overhead cost incurred .....	PZ78,000
Actual fixed manufacturing overhead cost incurred .....	PZ209,400

At the end of the year, the company's Manufacturing Overhead account contained the following data:

Manufacturing Overhead

Actual	287,400	Applied	272,000
	15,400		

(22%)

Management would like to determine the cause of the PZ15,400 underapplied overhead.

Required:

1. Compute the predetermined overhead rate. Break the rate down into variable and fixed cost elements. (6%)
2. Analyze the PZ15,400 underapplied overhead figure in terms of the variable overhead rate and efficiency variances and the fixed overhead budget and volume variances. (16%)

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四、 Minden Company introduced a new product last year for which it is trying to find an optimal selling price. Marketing studies suggest that the company can increase sales by 5,000 units for each \$2 reduction in the selling price. The company's present selling price is \$70 per unit, and variable expenses are \$40 per unit. Fixed expenses are \$540,000 per year. The present annual sales volume (at the \$70 selling price) is 15,000 units.

(30%)

Required:

1. What is the present yearly net operating income or loss? (3%)
2. What is the present break-even point in unit sales and in dollar sales? (6%)
3. Assuming that the marketing studies are correct, what is the maximum annual profit that the company can earn? At how many units and at what selling price per unit would the company generate this profit? (12%)
4. What would be the break-even point in unit sales and in dollar sales using the selling price you determined in (3) above (e.g., the selling price at the level of maximum profits)? Why is this break-even point different from the break-even point you computed in (2) above? (9%)

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