

系所組：會計學系碩士班

日期節次：100年3月20日第2節 11:00-12:30

科目：成本與管理會計

一、ABC Company's standard cost per unit of component part R₁ is \$4. During the month, 6,000 units of R₁ were purchased at a total cost of \$25,200. In addition, 7,100 units of R₁ were used during the month; however, the standard quantity allowed for actual production is 6,900 units.

Required:

- (1) Compute the materials purchase price variance and the materials quantity variance, and indicate whether the variances are favorable or unfavorable.
- (2) Assume materials are inventoried at actual cost and the beginning inventory of R₁ contained 2,000 units at a total cost of \$8,240. Compute the materials price usage variance assuming the average cost method is used for materials inventory.

※請注意：本題只要寫出最終的答案，不要列出計算或推演過程，共 30 分。

二、DEF Company manufactures two products, tables and chairs. Tables sell for \$110 each and chairs for \$35 each. Four times as many chairs are sold each year as tables. Variable costs per unit are \$50 and \$20 for tables and chairs, respectively. Total fixed cost is \$720,000.

Required:

Compute the break-even point in sales dollars and in units of production.

※請注意：本題只要寫出最終的答案，不要列出計算或推演過程，共 20 分。

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三、問題 1：(20分)

Casey Corporation produces a special line of basketball hoops. Casey Corporation produces the hoops in batches. To manufacture a batch of the basketball hoops, Casey Corporation must set up the machines and molds. Setup costs are batch-level costs because they are associated with batches rather than individual units of products. A separate Setup Department is responsible for setting up machines and molds for different styles of basketball hoops.

Setup overhead costs consist of some costs that are variable and some costs that are fixed with respect to the number of setup-hours. The following information pertains to January 2005.

	Static-budget Amounts	Actual Amounts
Basketball hoops produced and sold	30,000	28,000
Batch size (number of units per batch)	200	250
Setup-hours per batch	5	4
Variable overhead cost per setup hour	\$10	\$9
Total fixed setup overhead costs	\$22,500	\$21,000

Required:

- (1) Calculate the efficiency variance for variable setup overhead costs. (5分)
- (2) Calculate the spending variance for variable setup overhead costs. (5分)
- (3) Calculate the spending variance for fixed setup overhead costs. (5分)
- (4) Calculate the production-volume variance for fixed setup overhead costs. (5分)

四、問題 2：(15分)

Cape Cod Lobster Shacks, Inc.(CCLS) is a seafood restaurant chain operating throughout the northeast. The company has two sources of long-term capital: debt and equity. The cost to CCLS of issuing debt is the after-tax cost of the interest payments on the debt, taking into account the fact that the interest payments are tax deductible. The cost of CCLS's equity capital is the investment opportunity rate of CCLS's investors; that is, the rate they could earn on investments of similar risk to that of investing in Cape Cod Lobster Shacks, Inc. The interest rate on CCLS's \$120 million of long-term debt is 9 percent, and the company's tax rate is 40 percent. The cost of CCLS' equity is 14 percent. Moreover, the market value (and book value) of CCLS's equity is \$180 million.

Cape Cod Lobster Shacks, Inc., consists of two divisions, the properties division and the food service division. The divisions' total assets, current liabilities, and before-tax operating income for the most recent year are as follows:

Division	Total assets	Current liabilities	Before-tax operating income
Properties	\$217,500,000	\$4,500,000	\$43,500,000
Food Service	\$96,000,000	\$9,000,000	\$22,500,000

Required:

- (1) Calculate the weighted-average cost of capital for Cape Code Lobster Shacks, Inc.(5 分)
- (2) Calculate the economic value added (EVA) for each of CCLS's divisions. (10 分)

中國文化大學 100 學年度碩士班考試入學招生考試

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五、問題 3：(15分)

Clear Window Company manufactures windows for the home-building industry. The window frames are produced in the Frame Division. The frames are then transferred to the Glass Division, where the glass and hardware are installed. The company's best-selling product is a three-by-four-foot, double-paned operable window.

The Frame Division also can sell frames directly to custom home builders, who install the glass and hardware. The sales price for a frame is \$160. The Glass Division sells its finished windows for \$220. The markets for both frames and finished windows exhibit perfect competition.

The standard variable cost of the window is detailed as follows:

	Frame Division	Glass Division
Direct material	\$15	\$10*
Direct labor	40	25
Variable overhead	30	10

*Not including the transfer price for the frame.

Required:

Answer the following questions assuming that there is excess capacity in the Frame Division.

- (1) Use the general rule to compute the transfer price for window frames. (5 分)
- (2) Suppose the predetermined fixed-overhead rate in the Frame Division is 125 percent of direct-labor cost. Calculate the transfer price if it is based on standard full cost plus a 10 percent markup. (5 分)
- (3) Assume the transfer price established in (2) is used. The Glass Division has been approached by the U.S. Army with a special order for 1,200 windows at \$188. Will an autonomous Glass Division manager accept or reject the special order? (5 分)