國立臺北大學 103 學年度碩士班一般入學考試試題

系（所）組別：會計學系

科　　　目：成本與管理會計學

☑可 □不可使用計算機

1. Reuter Avionics currently sells radios for $1,800. It has costs of $1,400. A competitor is bringing a new radio to market that will sell for $1,600. Management believes it must lower the price to $1,600 to compete in the market for radios. Marketing believes that the new price will cause sales to increase by 10%, even with a new competitor in the market. Reuter's sales are currently 1,000 radios per years.

   Required:

   (a) What is the target cost if target operating income is 25% of sales? (6%)

   (b) What is the change in operating income if marketing is correct and only the sales price is changed? (6%)

   (c) What is the target cost if the company wants to maintain its same income level, and marketing is correct? (8%)

2. A proposed cost-saving device has an installed cost of $59,400. It will be depreciated for tax purposes on a straight-line basis over three years (zero salvage), although its actual life will be five years. The tax rate is 34 percent and the required rate of return on investments of this type is 10 percent.

   Required:

   What is the minimum pre-tax savings per year to favor the investment? Assume a zero salvage value for the device at the end of the five years. (15%)

3. Explain the incentive problems that can arise when employees must perform multiple tasks as part of their jobs. Propose possible ways to mitigate these problems. (15%)

4. Taipei Company, a manufacturer of quality handmade shoes, has had a steady growth in sales for the past three years. However, increased competition has led Mr. Shiue, the president, to believe that an aggressive marketing campaign will be necessary next year to maintain the company's present growth. To prepare for next year's marketing campaign, the company's controller has prepared and presented Mr. Shiue with the following data for the current year, 2013:

Variable cost（per unit）	
Direct materials	$20
Direct manufacturing labor	20
Variable costs（per unit）	
Manufacturing	30
Marketing, distribution, and customer service	40
Total variable cost per unit	$110
Fix costs	
Manufacturing	$ 500,000
Marketing, distribution, and customer service	2,000,000
Total fix costs	$ 2,500,000

Units produced	50,000 units
Units sold	45,000 units
Selling price	$200 per unit

Required:

(a) What is Taipei's operating income for 2013 under (1) variable costing and (2) absorption costing?（10%）

(b) What is Taipei's breakeven point in units for 2013 under absorption costing?（5%）

(c) If the additional $400,000 is spent for advertising and the selling price, units produced, and all other costs remain unchanged in 2014. How many shoes does Taipei need to sell if it want to earn the same operating income as in 2013 under absorption costing ?（5%）

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5. Taiwan Company produces joint products A and B. The process also yields byproduct C. The Company needs to allow 20% of revenues for marking costs on byproduct C. Taiwan Company accounts for the byproduct in accordance with IAS 2. In March 2014, costs of processing all three products to splitoff point are described as follows:

Direct materials	$ 30,000
Direct labor	55,000
Overhead	45,000

The other information pertains to production in March 2014 is:

Product	Units produced	Split-off values	Additional costs after split-off	Sales value after further processing
A	1,200	$130,000	$ 60,000	$ 160,000
B	1,000	120,000	20,000	120,000
C	200		10,000	50,000

Required:

(a) What is the amount of joint costs allocated to products A and B using the method in accordance with IAS 2?（10%）

(b) Assuming Taiwan Company accounts for joint products in accordance with IAS 2, should Taiwan Company process A further or sell it at split-off? Show your calculations.（5%）

6. The customer service department of PTC company allocates indirect costs using traditional activity based costing (ABC). The department performs three activities: processing customer orders, handling customer inquiries, and performing credit checks. The department's total expenses amount to $630,000 for its first fiscal quarter of 2014. Ann, the controller of PTC company, reported the following data for the department's first fiscal quarter of 2014:

Activity	Activity Quantity	Cost Driver
Process orders	50,000	Number of orders
Handle inquiries	1,500	Number of inquiries
Perform credit checks	3,000	Number of credit checks

Ann is concerned, however, that traditional ABC is too expensive to build and maintain. She considers implementing time-driven ABC (TDABC). Ann decides to collect the related data and explore whether TDABC is also valuable for understanding and managing costs. Ann calculates the cost per time unit based on practical capacity, assumed here at 80% of theoretical full capacity (875,000 minutes), for the department's first fiscal quarter of 2014. She determines that it takes 10 minutes to process an order, 30 minutes to handle an inquiry, and 40 minutes to perform a credit check.

Required:

(a) Calculate the cost driver rate for each activity.（6%）

(b) Calculate the cost per minute of supply capacity.（2%）

(c) Calculate the unused capacity (in minutes) and the cost of the unused capacity.（7%）