

Department of Accounting
College of Commerce
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Ph.D. Qualifying Exam- Managerial Accounting
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PART 2

2-1:

Suppose the cost function of Cheng-Chi company, which produces two products, is given as follows:

$$C = 100 - 0.5Q_1Q_2 + (Q_1)^2 + (Q_2)^2$$

Cheng-Chi company plans to produce 5 units of good 1 and 4 units of good 2.

Requirement: **(25%)**

- (1) Do cost complementarities exist between two products? Why?
- (2) Cheng-Chi company is considering selling the subsidiary that produces good 2 to Taipei company, in which case it will produce only good 1. What will happen to Cheng-Chi company's cost if it continues to produce 5 units of good 1?
- (3) Please use calculus to show that the relation between average and marginal costs in these two products of Cheng-Chi company.
- (4) The preceding question illustrates important aspects of sales of subsidiaries. How do you think the results can be applied to address the similar managerial accounting issues? Why?

2-2:

Do you agree to price products/services based on full cost according to the result of Banker and Hansen (2002) (Journal of management Accounting Research, pp.33-57)? Please explain the reasons. Besides cost, which key factors should be considered in pricing decisions for the services? What are the main contribution of the work of Banker and Hansen (2002)? Comparing to the work of Banker and Hughes (1994) (Product Costing and Pricing, Accounting Review, 1994, pp.497-494), please point out the improvements in the work of Banker and Hansen (2002). **(25%)**