

**Department of Accounting, College of Commerce
National Chengchi University
Managerial Accounting, Ph.D. Qualification Examination**

May 31, 2010, PART II – 50%

1. Asymmetric information between employees, consumers and the firm can affect firm profits. Asymmetric information affects many managerial decisions, including hiring workers and designing products for customers. Please examine two specific manifestations of asymmetric information: adverse selection and moral hazard. Illustrate the situation of these two manifestations of asymmetric information in the decisions of hiring workers and designing products for customers. Furthermore, please analyze effects of such adverse selection and moral hazard on the design of incentive system in the firm. (12 %)

2. Prior literature developed analytical model to express the role of cost allocation in the setting of competition and incentive system. Please cite two related papers which you have read to explain agency problem and the model setting in these studies. What do you think to make a major improvement in these two papers? What results will be made by your improvement? (12%)

3. By engaging interfirm relationships, firms become subject to additional control problems, such as allocating cost, increasing motivation and monitoring.
(1) Describe the nature of control problems that firms need to manage when collaborating with other firms. (5%)
(2) Compare control problems caused in interfirm relationships and intrafirm's collaboration relationships. (5%)

4. The usual total cost function for a firm in economic can be written as:

$$C(w, y) = \sum_{i=1}^N c_i(w, y_i) + F \quad \text{equation(1)}$$

Where w is a vector of input prices, $j=1, \dots, M$; y is a vector of product volumes, $i=1, \dots, N$, subscripts index products and F represents fixed costs.

Required:

- (1) Please write a equation to express a usual total cost function using Activity Based Costing (ABC). (3%)
- (2) If firm A produce H and L products and compete in Market H and L with Firm B. Firm A and B can choose ABC or the costing method of equation 1 to decide production decisions. Please develop an analytical model to compare the differences of decision making between ABC and the costing method of equation. Please discuss your answer based on the model which you developed. (13%)