

所別：財務金融學系碩士班甲、乙組 科目：經濟分析

Please note that you can answer the questions in either Chinese or English.

1. Please briefly explain the following:
 - (1) Fisher Effect (3%)
 - (2) Tobin's Q (3%)
 - (3) Okun's Law (3%)
 - (4) Purchasing Power Parity (3%)
 - (5) *Ex Post* Real Interest Rate and *Ex Ante* Real Interest Rate (3%)

2. The Mundell-Fleming model is a model for small open economy.
 - (1) What is the basic assumption and the IS, LM equations of the model? (5%)
 - (2) Suppose there are two small open economies; one is under floating exchange rate system and the other is under fixed exchange rate system. What are the different impacts of the fiscal and the monetary policies for the two economies? (10%)
 - (3) Considering yourself as a chief economic advisor in a small open economy under floating exchange rate system. The election is approaching, and your boss, the president of the country, wants to increase the level of output in the short-run in order to retain the ruling power. What policy will you recommend? Please also illustrate graphically. (5%)

3. The issue of monetary neutrality has long been debated by financial economists. Some empirical studies find that there is a positive relation between expansionary monetary policy shocks and stock returns; others suggest that there is no such relation. Based on your knowledge in macroeconomics and empirical methods, what might be the reason(s) for the different results? Does it mean that monetary neutrality does not exist in the real world? Finally, what statistical method(s) you might use for testing such a relation? (15%)

參考用

注意：背面有試題

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4. A monopolist can practice ordinary price discrimination in the following two markets. The first has a demand represented by $q_1=50-p_1$, and the second has a demand $q_2=25-p_2$. Its cost function is $C=10+0.5q^2$. What is the profit-maximizing price and output strategy for this firm? (10%)
5. Suppose that you have an income of \$1,000 and is an expected utility maximizer. You are offered to pay \$100 for a lottery ticket that yields \$100,000 with a probability of 0.2 (and yields zero otherwise). If your utility function is described by $U(w)=2w^{2/3}+10$, will you participate in the lottery? (8%)
6. Sean's preferences over books and movies may be represented by $U(x,y)=2\ln x+\ln y$.
- (1) Suppose the price of a book is \$10, the price of a movie is \$8 and his income is \$120. What is Sean's optimal consumption bundle? (8%)
- (2) Now suppose that the price of books doubles to \$20. How much compensatory income would he have to receive in order that this price increase does not affect his utility level? (8%)
7. Two firms produce products that are perfect substitutes for each other, but the cost of production are different for the two firms. The demand and cost conditions are described by
- $$p = 100 - \frac{(y_1 + y_2)}{2} \quad \text{and} \quad MC_1=19, MC_2=y_2$$
- where p is the market price, y_1 is the quantity produced by firm 1, y_2 is the quantity produced by firm 2, MC_1 is the marginal cost of production by firm 1, and MC_2 is the marginal cost of production by firm 2.
- (1) Derive the quantity reaction function for each firm on the assumption of Cournot behavior. Determine the equilibrium quantities for each firm and the market price. (8%)
- (2) What will happen to the equilibrium quantities for each firm and the market price if the two firms decide to collude and maximize joint profit rather than compete as Cournot duopolists? (8%)

參考用