淡江大學 97 學年度碩士班招生考試試題

89-1

系別：財務金融學系　　科目：經　濟　學

准帶項目請打「V」	
V	簡單型計算機

本試題共 2 頁，7 大題

1. (5%) The Federal Reserve usually keeps the discount rate
(a) equal to the target federal funds rate.
(b) above the target federal funds rate.
(c) below the target federal funds rate.
(d) equal to zero.

2. (5%) The amount of borrowed reserves is _____ related to the discount rate, and is _____ related to the market interest rate.
(a) positively; negatively
(b) positively; positively
(c) negatively; negatively
(d) negatively; positively

3. (5%) An expansionary monetary policy lowers the real interest rate, causing the domestic currency to _____, thereby _____ net exports.
(a) appreciate; raising
(b) appreciate; lowering
(c) depreciate; raising
(d) depreciate; lowering

4. (5%) In a used car market, 25 percent of the cars are lemons and the rest are gems. Buyers do not know if a car is a lemon or a gem, but sellers know. Buyers are willing to pay 120 percent of seller's value for a car, and seller's values are $4,000 for a gem and $2,000 for a lemon. In market equilibrium,
(a) price is between 4,000 and 4,800, and deadweight loss is zero.
(b) price is between 4,000 and 4,800, and deadweight loss is positive.
(c) price is between 2,000 and 2,400, and deadweight loss is zero.
(d) price is between 2,000 and 2,400, and deadweight loss is positive.

5. (5%) The production function $Q = (X_1^{-1} + X_2^{-1})^{-1}$ yields the following formula for the marginal rate of substitution in production of input 2 (X_2) for input 1(X_1) (that is, the slope of the isoquant with X_1 on the vertical axis and X_2 on the horizontal axis):
(a) X_1 / X_2
(b) $(X_1 / X_2)^{1/2}$
(c) $(X_1 / X_2)^2$
(d) -1

6. (20%) Suppose the demand for cigarettes is $Q = 15 - 0.5P$ and the supply of cigarettes is $Q = P - 3$, where P is the price per pack of cigarettes. Suppose the government imposes a cigarette tax of $3 per pack.
(1) What is the price received by producers?
(2) What is the price faced by consumers?
(3) What is the government revenue from the tax?
(4) What is the total dollar amount of tax revenue paid by consumers?

注意背面尚有試題

本試題雙面印製

89-2

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7. (20%) Suppose two individuals, Perry and Jacky, are the only inhabitants of an island. Each individual has an endowment of 10 hours of labor (L) that is completely devoted to the production of yams (Y) and fish (F). These goods can be produced accordingly to the following production functions:

$Y = 3L_Y$

$F = 2L_F$

The utility functions of Perry and Jacky are given by:

$U_P = Y_P^{0.5} F_P^{0.5}$

$U_J = Y_J^{0.3} F_J^{0.7}$

Assuming that the wage rate is one, the island is a perfect competitive economy, and as in the case of the Robinson's island that every morning there will be three individuals come from a neighbor island to be the managers of the firms and the auctioneer (the salaries of the three individuals are covered entirely by external grants).

(1) Write out the equation for the production possibilities frontier of this economy.
(2) Find the prices of Y and F.
(3) Find the quantities of Y and F demanded by Perry and Jacky.
(4) What will be the allocation of labor on Y and F?

8. (15%) The Phillips curve for the Simpleland is

$$\dot{P}(U) = \frac{0.0012}{U - 0.03} - 0.02$$

And for the Econoland is

$$\dot{P}(U, \dot{P}^e) = \frac{0.0012}{U - 0.03} - 0.02 + \dot{P}^e$$

Where $\dot{P}$ is the rate of inflation, $\dot{P}^e$ is the expected rate of inflation and U is the unemployment rate.

(1) What is the full-employment rate of unemployment (i.e., the inflation-threshold unemployment rate) in Simpleland?
(2) What is the natural rate of unemployment in Econoland?
(3) What is the significance of the difference between the two alternative formulations of the Phillips Curve?

9. (20%) Suppose the production function is $Y = K^{\quad} L^{\quad}$. The saving rate is [illegible]. The rate of depreciation is 0.1. Both labor force growth and technological growth are zero. Denote $k = K/L$ as the ratio of capital to worker.

(1) What is k^*, the steady-state value of k?
(2) If $L = 1000$, what is the steady-state value of total output (Y)?
(3) What is the Golden Rule level of k^*?
(4) What saving rate will produce that Golden Rule level of k^*?