國立成功大學

112學年度碩士班招生考試試題

編　號：332

系　所：經濟學系

科　目：總體經濟學

日　期：0206

節　次：第 3 節

備　註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

Problem 1 (50%) 單選題

1. (5%) What is the superneutrality of money?

    A) A one-time change in the money supply has no real impact.

    B) A one-time change in the money supply has a real impact.

    C) A change in the money growth rate has no real impact.

    D) A change in the money growth rate has a real impact.

    E) None of these.

2. (5%) According to Robert Solow's growth accounting, a change in aggregate output is attributed

    A) to its most important single cause.

    B) separately between changes in government policy and changes in total factor productivity.

    C) separately between changes in total factor productivity and changes in the supplies of factors of production.

    D) separately between changes in the supplies of factors of production and changes in government policy.

    E) to increasing return to scale.

3. (5%) The implication of rational expectations is

    A) that consumers make systematical mistakes.

    B) that in models with aggregate supply shocks, consumers and firms always correctly forecast inflation.

    C) that the central bank always foresees the impacts of monetary policy.

    D) that the consumers and firms in models do the best they can in forecasting future economic variables.

    E) none of these

4. (5%) Which of the follows can justify an active role for government in stabilizing the economy?

　A) Consumers are not rational and that not all wages and prices are flexible.

　B) Not all wages and prices are flexible and that government must be able to react quickly enough.

　C) Government must be able to react quickly enough and that shocks to the economy be primarily due to aggregate supply shocks.

　D) Shocks to the economy be primarily due to aggregate supply shocks and that consumers are not rational.

　E) All of these.

5. (5%) If a consumer faces a borrowing rate that is greater than the lending rate in a two-period model, then

　A) the budget constraint has a kink at the endowment point.

　B) banks cannot make a profit.

　C) the consumer must be a lender.

　D) this makes no difference for consumer behavior.

　E) none of these.

6. (5%) The Diamond-Dybvig model provides an account of

　A) bank runs

　B) currency attack

　C) the role for deposit insurance

　D) the role for a central bank

　E) the lender of last resort

7. (5%) Addams believes that the inflation in this year will be around 9% because it was around 9% in the previous year. Addams can be said to have:

    A) composite expectations.

    B) marginal expectations.

    C) rational expectations.

    D) adaptive expectations.

    E) none of these

8. (5%) Which of the following is the most powerful argument for putting restraints on central banks

    A) time inconsistency

    B) uncertainty about future inflation

    C) uncertainty about the timing of policy impacts

    D) disagreements about the proper structure of an econometric model

    E) all of these

9. (5%) In an open economy under flexible exchange rates, a reduction in the interest rate will cause a reduction in which of the following?

    A) Investment

    B) Value of domestic currency

    C) Net exports

    D) All of these

    E) None of these

10. (5%) Suppose that financial market participants expect that the central bank will pursue a monetary expansion in the future. Also assume that the yield curve is initially upward sloping. Given this information, we would expect which of the following to occur?

    A) The yield curve will become steeper.

    B) The yield curve will become flatter.

    C) The yield curve will become horizontal.

    D) The yield curve will become downward sloping.

    E) None of these

Problem 2 (30%)

Consider a small open economy where a representative agent lives for two periods with utility given by

$$\frac{C_1^{1-\frac{1}{\sigma}}}{1-\frac{1}{\sigma}} + \beta\frac{C_2^{1-\frac{1}{\sigma}}}{1-\frac{1}{\sigma}}, \;\; \sigma > 0,$$

where $\beta \in (0,1)$ represents the discount factor, and C_1 and C_2 denote consumptions in period 1 and 2, respectively. There is no production activity while the individuals receive an exogenous endowment for each period, (Y_1, Y_2). Let B_t be the foreign bond at the end of period $t-1$, and r denotes the world interest rate. Assume that $B_1 = 0$.

a. (5%) Write down the two period-by-period budget constraints and the intertemporal (life-time) budget constraint.

b. (5%) What is the Transversality condition in this two-period model?

c. (5%) Under what conditions will the current account for period 1 (CA_1) be positive?

d. (5%) How does an increase in β affect CA_1? Provide an economic interpretation.

e. (5%) Calculate the equilibrium interest rate under autarky, denoted by r^A.

f. (5%) How do changes in Y_2 affect r^A? Provide an economic intuition to explain you findings.

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Problem 3 (20%)

Consider an unemployed worker who receives one job offer on the following terms. Each period, with probability π the worker receives an offer with wage a. With probability $1 - \pi$ he or she receives an offer with wage w which is drawn from a cumulative distribution function $F(w)$, with $F(a) = 0, F(b) = 1$ for $a < b < \infty$. Successive drawings across periods are independently and identically distributed. The worker can choose to accept or reject the offer. However, it is a permanent contract and neither quitting nor firing is permitted. Once the worker accepts the offer, he or she receives a wage w per period forever. If the worker rejects the offer, he or she receives c in the current period and draws another offer next period. Let y_t be the worker's income in period t. The worker maximized his/her expected discounted utility given by

$$E \sum_{t=0}^{\infty} \beta^t y_t,$$

where $\beta \in (0, 1)$.

   a. (10%) Derive the equation which characterizes the optimal solution of the unemployed worker.

   b. (10%) What will the reservation wage change when π increases? Provide intuition and explain.