

考試科目	經濟學	所別	商學院共同科目	考試時間	2月28日(六)第一節
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Multiple Choice (1 point each)

Identify the letter of the choice that best completes the statement or answers the question.

- Suppose that for a particular firm the only variable input into the production process is labor and that output equals zero when no workers are hired. In addition, suppose that when the firm hires 4 workers, the firm produces 50 units of output. If the fixed cost of production is \$8, the variable cost per unit of labor is \$20, and the marginal product of labor for the fifth unit of labor is 4, what is the average total cost of production when the firm hires 5 workers?
 - \$2.
 - \$4.
 - \$5.
 - \$20.
- If soybean farmers know that the demand for soybeans is inelastic, in order to increase their total revenues they should
 - use more fertilizers and weed killers to increase their yields.
 - plant additional acres to increase their output.
 - reduce the number of acres they plant to decrease their output.
 - hire more workers to plow the land.
- The price received by sellers in a market will increase if the government
 - decreases a binding price floor in that market.
 - increases a binding price ceiling in that market.
 - increases a tax on the good sold in that market.
 - stops subsidizing the seller.
- Neither public goods nor common resources are
 - excludable, but only public goods are not rival in consumption.
 - excludable, but only common resources are not rival in consumption.
 - rival in consumption, but only public goods are not excludable.
 - rival in consumption, but only common resources are not excludable.

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- 作答於試題上者，不予計分
- 試題請隨卷繳交。

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5. When producers operate in a market characterized by negative externalities, a tax that forces them to internalize the externality will
- give sellers the incentive to account for the external effects of their actions.
 - increase demand.
 - increase the amount of the commodity exchanged in market equilibrium.
 - restrict the producers' ability to take the costs of the externality into account when deciding how much to supply.
6. As a general rule, profit maximizing producers in a competitive market produce output at a point where
- marginal cost is decreasing.
 - marginal revenue is increasing.
 - marginal cost is increasing.
 - price is less than marginal revenue.
7. When a country allows trade and becomes an exporter of a good, which of the following would NOT be true?
- The price paid by domestic consumers of the good increases.
 - The price received by domestic producers of the good increases.
 - The losses of domestic consumers exceed the gains of domestic producers.
 - The gains of domestic producers exceed the losses of domestic consumers.
8. Price discrimination requires the firm to
- differentiate between different units of its product.
 - engage in arbitrage.
 - separate customers according to their willingness to pay.
 - All of the above.
9. Assuming the oligopolists do not have the opportunity to collude, once they have reached the Nash equilibrium,
- it is always in their best interest to supply more to the market.
 - it is always in their best interest to leave supply unchanged.
 - it is always in their best interest to supply less to the market.
 - it may be their best interest to do any of the above, depending on market conditions.

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10. If a firm in a monopolistically competitive market uses advertising to decrease elasticity of demand for its product,
- the firm will eventually have to lower price to remain competitive.
 - it will be able to increase its mark-up over marginal cost.
 - it will increase the well-being of society.
 - it will reduce average total cost.
11. Policy makers should use a variety of fiscal and monetary policy measures to stabilize the economy since
- this will shorten any policy lags.
 - this will always maintain full employment.
 - this will eliminate multiplier uncertainty.
 - there is a chance that errors in estimating one multiplier will be offset by errors in estimating another.
 - None of the above.
12. According to liquidity preference theory, an increase in money demand for some reason other than a change in the price level causes
- the interest rate to fall, so aggregate demand shifts right.
 - the interest rate to fall, so aggregate demand shifts left.
 - the interest rate to rise, so aggregate demand shifts right.
 - the interest rate to rise, so aggregate demand shifts left.
13. One of the assertions that Keynesians make when explaining the severity of the Great Depression in the U.S. is that
- the economic collapse originated from the negative effect that the stock market crash had on individuals' wealth.
 - investment spending responded negatively to huge increases in the real interest rate.
 - vigorous use of expansionary fiscal policy early on could have reduced the severity of the economic downturn.
 - in response to the stock market crash, the U.S. Fed imposed credit controls that were much too restrictive.
 - None of the above.

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14. Suppose that during the Great Depression long-run aggregate supply shifted left. To be consistent with what happened to the price level and output, what would have had to happen to aggregate demand?

- A. It would have to have shifted left by less than aggregate supply.
- B. It would have to have shifted left by more than aggregate supply.
- C. It would have to have shifted right by less than aggregate supply.
- D. It would have to have shifted right by more than aggregate supply.

15. During the period referred to as "the Great Moderation"

- A. there were only mild economic fluctuations despite severe supply shocks.
- B. few policy changes were implemented so output stayed close to the full employment level.
- C. economic fluctuations were largely contained through effective policy changes.
- D. inflation consistently exceeded 4 percent.
- E. All of the above.

16. Given a certain rate of nominal money growth, an increase in inflation will cause output growth to

- A. increase.
- B. decrease.
- C. remain constant.
- D. More information is needed to answer the question.

17. Research by John Taylor on the staggering of wage decisions indicates which of the following actions by the central bank should be taken to reduce inflation?

- A. a rapid, unannounced reduction in money growth
- B. a slow, unannounced reduction in money growth
- C. a rapid, announced reduction in money growth
- D. a slow, but gradually faster, announced reduction in money growth

18. Which of the following actions by the Federal Reserve will result in an increase in the money supply?

- A. an increase in federal spending
- B. an increase in buying stocks in the open market
- C. a decrease in the discount rate
- D. an increase in the required reserve ratio

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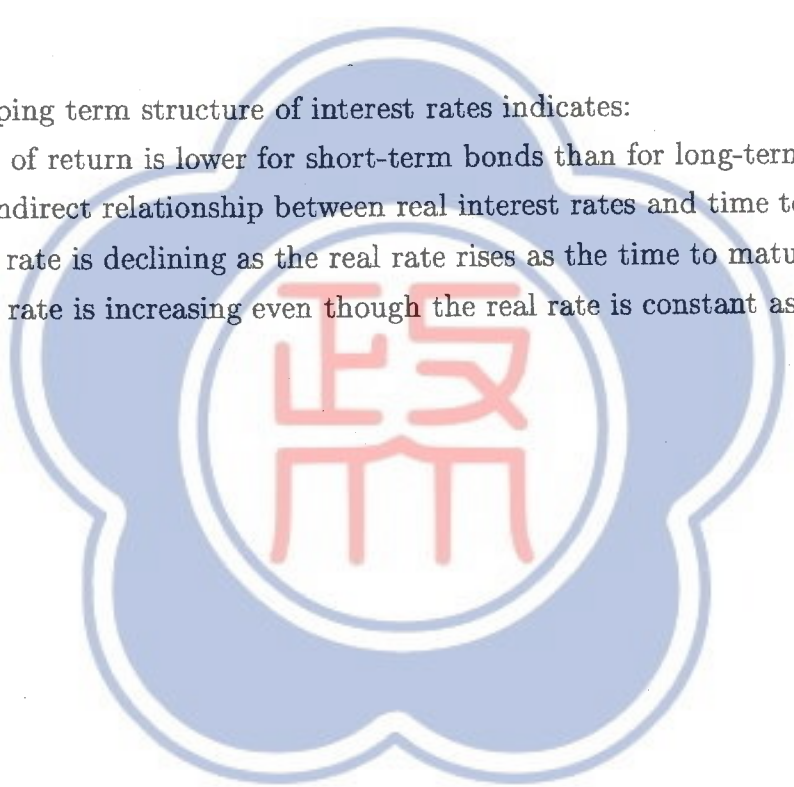
19. A 10% devaluation in the short run will cause

- I. an increase in net exports.
- II. price level to increase by more than 10%.
- III. a real depreciation.
- IV. an increase in unemployment rate.

- A. I, II
- B. III, IV
- C. I, III
- D. I, II, IV

20. An upward-sloping term structure of interest rates indicates:

- A. the real rate of return is lower for short-term bonds than for long-term bonds.
- B. there is an indirect relationship between real interest rates and time to maturity.
- C. the nominal rate is declining as the real rate rises as the time to maturity increases.
- D. the nominal rate is increasing even though the real rate is constant as the time to maturity increases.



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Problems and Short-essay Questions

Please answer the following questions IN SEQUENCE. All questions may be answered in either Chinese or English.

1. John receives NT\$600 per week as an allowance to spend on anything he likes. Because he likes only soda and chips, he spends the entire amount on soda (at NT\$20 per bottle) and chips (at NT\$15 per bag). John always consumes soda and chips in the fixed proportion of one to two. That is, his preference can be represented by the utility function

$$U(s, c) = \min \left\{ s, \frac{c}{2} \right\}.$$

a. (4 points) How many bottles of soda and how many bags of chips will John buy with his NT\$600 allowance in a week?

b. (4 points) Suppose the price of soda were to increase to NT\$30 a bottle. How much of each commodity would be bought?

c. (6 points) By how much should John's allowance be increased to compensate for the increase in the price of soda in part (b)?

d. (6 points) Compare your answers in part (a) and part (b). How much of the decrease in the consumption of soda is attributable to the substitution effect and income effect, respectively?

2. (20 points) There is a small open economy producing two goods, food and cloth. The production function in food industry is represented by the following Cobb-Douglas production technology

$$Q_f = L_f^{\frac{1}{2}} T^{\frac{1}{2}},$$

where L_f is the labor hired in food industry and T is land. The production function in cloth industry is

$$Q_c = L_c^{\frac{1}{2}} K^{\frac{1}{2}},$$

where the subscript c represents cloth and K is capital. Labor is mobile between sectors. Supply of all factors is fixed.

a. Derive the real return of labor, capital and land in terms of each good.

b. How does the standard of living of each factor owner change when the supply of cloth in the international market decreases?

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3. a. (8 points) Explain in detail how the Keynesian aggregate supply curve differs from the classical one?

b. (12 points) The aggregate demand model looks very similar to the standard demand model of microeconomics. State three reasons that cause the aggregate demand curve to be negatively sloped. Be sure to elaborate on those reasons carefully! DO NOT just list your reasons.

4. The Swiss National Bank (SNB) made an unexpected announcement on January 15th this year that it would remove its cap on Swiss franc's value vs. the euro, effective immediately. The SNB set a goal of keeping its currency from rising beyond 1.20 francs to the euro since September 2011 and that had been the de facto fixed exchange rate ever since. The Swiss economy has expanded more rapidly than the Eurozone's in recent years and was expected to do so in the near future.

a. (5 points) Please explain the rationale of the SNB to keep the cap in the past three-and-half years and how the SNB can achieve it.

b. (5 points) One reason that the SNB scraped the peg because the quantitative easing program (QE) the European Central Bank (ECB) was about to launch in the following week. Please explain the effect of the QE program on the SNB and the Swiss franc if the cap was still in place.

c. (5 points) An Italian firm knows that it will have to pay 10 million Swiss francs to a Swiss chemical company 3 months later. The current spot exchange rate is 0.9623 euro per 1 CHF. The three-month forward rate is 0.9660 euro per 1 CHF. If you are the treasurer of the company and you are worried that the euro will depreciate in the next few weeks. What will you do with this only tool and is it a wise decision if the spot exchange rate turns out to be 0.9700 three months later?

d. (5 points) If the exchange rate also has a chance to go to 0.9620 euro per 1 CHF instead of the 0.9660 predicted by the forward rate (i.e. it can go either way), is there still a reason to hedge the exchange risk with a forward contract?

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