

國立交通大學 103 學年度碩士班考試入學試題

科目：經濟學(5152)

考試日期：103年2月14日 第2節

系所班別：科技管理研究所 組別：科管所

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【可使用計算機】*作答前請先核對試題、答案卷(試卷)與准考證之所組別與考科是否相符!!

壹、申論題(共40分;中文、英文作答皆可,但不得混用)

1. Define Nash equilibrium. (5%)
Please design a two-player, two-action game to illustrate a game with only one pure-strategy Nash equilibrium. Explain your answer. (5%)
Please design a two-player, two-action game to illustrate a game with two pure-strategy Nash equilibria. Explain your answer. (5%)
Please design a two-player, two-action game to illustrate a game without any pure-strategy Nash equilibrium. Explain your answer. (5%)
2. Define gross domestic product (GDP). (5%)
Can GDP correctly measure social welfare in a country? Why? (5%)
3. Define money supply. (5%)
Can commercial banks create money? Why? (5%)

貳、單一選擇題(請使用答案卡作答;共60分,每題2.5分,答錯不倒扣)

1. The adage, "There is no such thing as a free lunch," means
 - a. even people on welfare have to pay for food.
 - b. the cost of living is always increasing.
 - c. people face tradeoffs.
 - d. all costs are included in the price of a product.
2. Economists use the word *equality* to describe a situation in which
 - a. each member of society has the same income.
 - b. each member of society has access to abundant quantities of goods and services, regardless of his or her income.
 - c. society is getting the maximum benefits from its scarce resources.
 - d. society's resources are used efficiently.
3. The government has just passed a law requiring that all residents earn the same annual income regardless of work effort. This law is likely to
 - a. increase efficiency and increase equality.
 - b. increase efficiency but decrease equality.
 - c. decrease efficiency but increase equality.
 - d. decrease efficiency and decrease equality.
4. You have driven 500 miles on a vacation and then you notice that you are only 25 miles from an attraction you hadn't known about, but would really like to see. In computing the opportunity cost of visiting this attraction you had not planned to visit, you should include
 - a. both the cost of driving the first 500 and the next 25 miles.
 - b. the cost of driving the first 500 miles, but not the cost of driving the next 25.
 - c. the cost of driving the next 25 miles, but not the cost of driving the first 500.
 - d. neither the cost of driving the first 500 miles nor the cost of driving the next 25 miles.
5. A rational decision maker takes an action only if the
 - a. marginal benefit is less than the marginal cost.
 - b. marginal benefit is greater than the marginal cost.
 - c. average benefit is greater than the average cost.
 - d. marginal benefit is greater than both the average cost and the marginal cost.
6. A marginal change is a

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- a. change that involves little, if anything, that is important.
 - b. large, significant adjustment.
 - c. change for the worse, and so it is usually a short-term change.
 - d. small, incremental adjustment.
7. Trade between the United States and India
- a. benefits both the United States and India.
 - b. is a losing proposition for the United States because India has cheaper labor.
 - c. is a losing proposition for India because capital is much more abundant in the U.S. than in India.
 - d. is a losing proposition for India because U.S. workers are more productive.
8. Communist countries worked under the premise that
- a. markets were the best way to organize economic activity.
 - b. central planners were in the best position to determine the allocation of scarce resources in the economy.
 - c. households and firms, guided by an "invisible hand," could achieve the most efficient allocation of scarce resources.
 - d. allowing the market forces of supply and demand to operate with no government intervention would achieve the most efficient allocation of scarce resources.
9. In a market economy, economic activity is guided by
- a. the government.
 - b. corporations.
 - c. central planners.
 - d. self-interest and prices.
10. Which of the following could reduce economic efficiency?
- a. laws that encourage lawsuits
 - b. policies that redistribute income
 - c. policies that impose significant restrictions on international trade
 - d. All of the above are correct
11. Which of the following is an example of an externality?
- a. Annie purchases a handbag.
 - b. Bob's dog barks loudly during the night waking his neighbors.
 - c. Clark sells a book to Calvin.
 - d. David watches a scary movie.
12. Suppose that in Ireland total annual output is worth \$600 million and people work 30 million hours. In Canada total annual output is worth \$800 million and people work 50 million hours. Productivity is higher
- a. in Ireland. Most variation in the standard of living across countries is due to differences in productivity.
 - b. in Ireland. Differences in productivity explain very little of the variation in the standard of living across countries.
 - c. in Canada. Most variation in the standard of living across countries is due to differences in productivity.
 - d. in Canada. Differences in productivity explain very little of the variation in the standard of living across countries.
13. Which of the following is an important cause of inflation in an economy?
- a. increases in productivity in the economy

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- b. the influence of positive externalities on the economy
 - c. lack of property rights in the economy
 - d. growth in the quantity of money in the economy
14. It once took 90 percent of our population to grow our food. It now takes only 3 percent of the population to grow our food. Which of the following statements is true?
- a. This loss of jobs has been detrimental to our economy.
 - b. The government should provide subsidies to encourage more people to become farmers.
 - c. This reduction in the number of farmers explains the increase in the price of food.
 - d. This is progress because freed-up labor is used to produce other goods.
15. Which of the following statements is correct?
- a. Few economic models incorporate assumptions.
 - b. Different economic models employ different sets of assumptions.
 - c. Good economic models attempt to mimic reality as closely as possible.
 - d. Economic models, to be accepted, must be tested by conducting experiments.
16. The most obvious benefit of specialization and trade is that they allow us to
- a. work more hours per week than we otherwise would be able to work.
 - b. consume more goods than we otherwise would be able to consume.
 - c. spend more money on goods that are beneficial to society, and less money on goods that are harmful to society.
 - d. consume more goods by forcing people in other countries to consume fewer goods.
17. Suppose that Amanda receives a pay increase. We would expect
- a. to observe Amanda moving down and to the right along her given demand curve.
 - b. Amanda's demand for inferior goods to decrease.
 - c. Amanda's demand for each of two goods that are complements to increase.
 - d. Amanda's demand for normal goods to decrease.
18. If the price of walnuts rises, many people would switch from consuming walnuts to consuming pecans. But if the price of salt rises, people would have difficulty purchasing something to use in its place. These examples illustrate the importance of
- a. the availability of close substitutes in determining the price elasticity of demand.
 - b. a necessity versus a luxury in determining the price elasticity of demand.
 - c. the definition of a market in determining the price elasticity of demand.
 - d. the time horizon in determining the price elasticity of demand.
19. In a market, the marginal buyer is the buyer
- a. whose willingness to pay is higher than that of all other buyers and potential buyers.
 - b. whose willingness to pay is lower than that of all other buyers and potential buyers.
 - c. who is willing to buy exactly one unit of the good.
 - d. who would be the first to leave the market if the price were any higher.
20. When the government places a tax on a product, the cost of the tax to buyers and sellers
- a. is less than the revenue raised from the tax by the government.
 - b. is equal to the revenue raised from the tax by the government.
 - c. exceeds the revenue raised from the tax by the government.
 - d. Without additional information, such as the elasticity of demand for this product, it is impossible to compare the cost of a tax to buyers and sellers with tax revenue.
21. Who among the following is a free rider?

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- a. Mickey buys groceries from the store where he works.
 - b. Donald rides to work with Betsey, but he pays Betsey for gasoline and other travel-related expenses.
 - c. Fred drives 20,000 miles a year on public streets, but he pays no more in property taxes than Barney, who only drives 1,000 miles.
 - d. Wilma watches many public television programs, but she has never sent in a contribution to the station.
22. Which of the following is *not* a characteristic of a perfectly competitive market?
- a. Firms are price takers.
 - b. Firms have difficulty entering the market.
 - c. There are many sellers in the market.
 - d. Goods offered for sale are largely the same.
23. A U.S. firm buys cement mixers from China and pays for them with U.S. dollars.
- a. The purchase of the cement mixers increases U.S. net exports and the payment with dollars increases U.S. net capital outflow.
 - b. The purchase of cement mixers increases U.S. net exports and the payment with dollars decreases U.S. net capital outflow.
 - c. The purchase of cement mixers decreases U.S. net exports and the payment with dollars increases U.S. net capital outflow.
 - d. The purchase of cement mixers decreases U.S. net exports and the payment with dollars decreases U.S. net capital outflow.
24. When the interest rate decreases, the opportunity cost of holding money
- a. increases, so the quantity of money demanded increases.
 - b. increases, so the quantity of money demanded decreases.
 - c. decreases, so the quantity of money demanded increases.
 - d. decreases, so the quantity of money demanded decreases.