

國 立 清 華 大 學 命 題 紙

九十一學年度 科技管理研究所 甲、乙、丙 碩士班研究生招生考試

科目 經濟學 科號 5402、5502、5601 共 4 頁第 1 頁 *請在試卷【答案卷】內作答

一、 填充暨申論題： (You may use Chinese or English to answer the questions.

Answers must be in the same sequence as the questions.)

1. According to economic theory, the wage rate of an employee in a competitive _____ (2 points) market is equal to the value of his/her _____ (2 points) product. In a comparison of the scholastic achievements between Taiwanese and American students, research statistics show that, in junior high and high schools years, Taiwanese students score much better in mathematics and natural science than American students. The gap in college or university, however, tends to be narrower for students of engineering and science departments. Nevertheless, the wage rates of entering jobs across varying fields, blue collar, white collar, or knowledge workers, in the US are more than the double of those jobs in Taiwan.
 - a. Please list three reasons why the wage gap exists between the two countries? (5 points)
 - b. Please explain what skills Taiwanese students must develop to earn a higher pay in the future. (5 points)
 - c. Noting that a worker doesn't become smarter or produce more in overtime work, an MBA student is curious why overtime pay is much higher than the normal pay. Please list three reasons to explain to the student. (6 points)(Hint: In news reports, it's not unusual that US employers would lay off 10,000 workers during business downturns. In contrast, Taiwanese firms rarely have more than 1,000 employees.)

2. It's not unusual to see in sales promotions that a gasoline station gives out a free car wash coupon to customers filling up the tank, that 5 different music CDs are packaged in a parcel and sold at one discount price, that an Internet Service Provider signs on a web surfer for a monthly fee while providing free e-mail box or other membership, and that a housewife buys two bottles of laundry detergent and gets another for free. The marketing strategies are called under a single term as _____.(2 points) Yet, sometimes firms engaging in this kind of sales are challenged by competitors or a government body. For instance, Netscape accuse Microsoft for excluding vendors that would otherwise use Navigator instead of Internet Explorer. Therefore, the kind of marketing strategies are forbidden in antitrust (or Fair Trade Law in Taiwan) cases and referred to as _____. (2 points)
 - a. Please list three different situations in which a firm would engage in such a promotional effort. (5 points)
 - b. Please explain in economic terms why a firm would choose a substitute or a complement to promote its sale. (5 points)

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- c. Consider the case when a firm knows the demand of each good only up to a probabilistic distribution. Please explain in simple mathematics how can a firm earn more sales revenues by engaging in such a promotion. (6 points)
3. On the currency exchange board of Citibank, Taiwan, it displays, among others, the exchange rates of NT\$35.45/US\$ and NT\$0.26/Yen. A student is taught that the exchange rate between Japanese Yen and US Dollar can be calculated to be _____ (2 points) In getting the above calculation, the theory the student was taught is called _____ (2 points) general equilibrium in Macroeconomics, or simply _____ (2 points) in finance. A careful student yet unexpectedly finds from the same board that the posted exchange rate (Yen/US\$) is not the same as what she has calculated.
- a. Please list down three markets involved in the above statement. According to the macroeconomic theory one of the markets can be neglected and the corresponding exchange rate can be calculated. Please denote which market you have neglected. (4 points)
- b. Please briefly explain what has been assumed away by the economic or finance theory so that a discrepancy exists between the theoretical and the real worlds. (5 points)

二、 選擇題(每題 3 分) (Answers must in the same sequence as the questions.)

1. In the following, who has contributed the most for an economic theory of knowledge:
- Milton Friedman
 - John Nash
 - Gary Becker
 - Frederick Hayek
 - George Akerlof
2. In a world of zero transaction cost, equity financing is equivalent to bond financing. This is a famous theorem by:
- Ronald Coase
 - Black and Schole
 - Franco Modigliani and Merton Miller
 - Ricardo and Barro
 - none of the above
3. In a slight twist, it can be said that if a Board Chairman sufficiently loves her employees, then the employees would maximize the wealth of the company. The above statement is related to:
- Rotten Kid Theorem
 - Coase Theorem
 - Fixed Point Theorem
 - The Impossibility Theorem
 - none of the above.

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4. Which of the following has not been considered by the mainstream neoclassical economics:
 - a. network economics
 - b. game theory
 - c. information or uncertainty
 - d. entrepreneurship
 - e. all of the above.

5. In considering whether to get married or not, one is economically considering:
 - a. the person to be married to
 - b. raising children
 - c. profit maximization
 - d. transaction costs
 - e. all of the above.

6. Surfing web pages about mission statements of various businesses, which of the following words may appear least frequently for a good economic reason
 - a. customer
 - b. trust
 - c. competition
 - d. franchise

7. After attending several board meetings, a recently inaugurated chairman remarks that he can never understand why voting outcomes are so unpredictable. An economic reason for the statement is related to:
 - a. people are irrational
 - b. Arrow's impossibility theorem
 - c. imperfect information
 - d. there is too much business politics

8. Which of the following may be the number one problem identified in project management by successful project managers:
 - a. don't know the production function
 - b. don't know the cost function
 - c. communication between team members is just terrible
 - d. lack of authorization.

9. Which of the following may be attributed as Morris Chang's, the CEO and Chairman of TSMC, most unique decision leading to his great success:
 - a. Entering into global markets
 - b. Downsizing his staffs at the bad times
 - c. adopting ERP at the earliest time
 - d. Leaving IC design to other fabless design houses
 - e. all of the above.

10. Continuing the last question, Morris Chang is therefore said to be a champion in
 - a. cutting production cost
 - b. penetrating a market
 - c. utilizing network effects
 - d. obtaining trust from clients
 - e. none of the above.

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11. In terms of economic theory, which of the following cannot be a function of the budgeting process in a firm:
- resource allocation
 - communication
 - information sharing
 - agenda setting
 - all of the above.
12. In terms of economic theory, which of the following best describes the general accounting principle:
- it's a financial measure
 - it's useful only under government enforcement
 - it's an institution governing business relationship
 - it's the basis for econometrics
 - none of the above.
13. An economist warns that in a knowledge economy the marginal productivity theory of wage has its limitations. Which of the following shows a deep understanding of the warning:
- there should be more individual incentives
 - it's because the valuation of new technology or new product is uncertain
 - no one wants to be the 'marginal' worker in a team
 - intellectual property right become more important
 - none of the above.
14. In comparing the fees of Internet connections, it's found that most US modem connection operators charge only an access fee of unlimited use, while China Telecom charges an access fee and a use fee by time. Which of the following depicts a possible economic outcome of the different ways in collecting fees:
- dot coms must go under,
 - Internet Café becomes popular in Taiwan but not US,
 - the average time spent on the Internet in the US is longer than in Taiwan,
 - the demand of broadband is hotter in Taiwan than in the US
 - all of the above.
15. Amidst controversies about the migration of Taiwanese businesses to mainland China, a thoughtful student contemplates also on why they don't migrate to the US. Which of the following reasons, considered alone, may be significant in a careful economic analysis:
- the low wage rate in mainland China,
 - the huge market potential in mainland China,
 - the small and medium size of Taiwanese firms,
 - it's easier to assemble a team in mainland China than in the US,
 - all of the above.