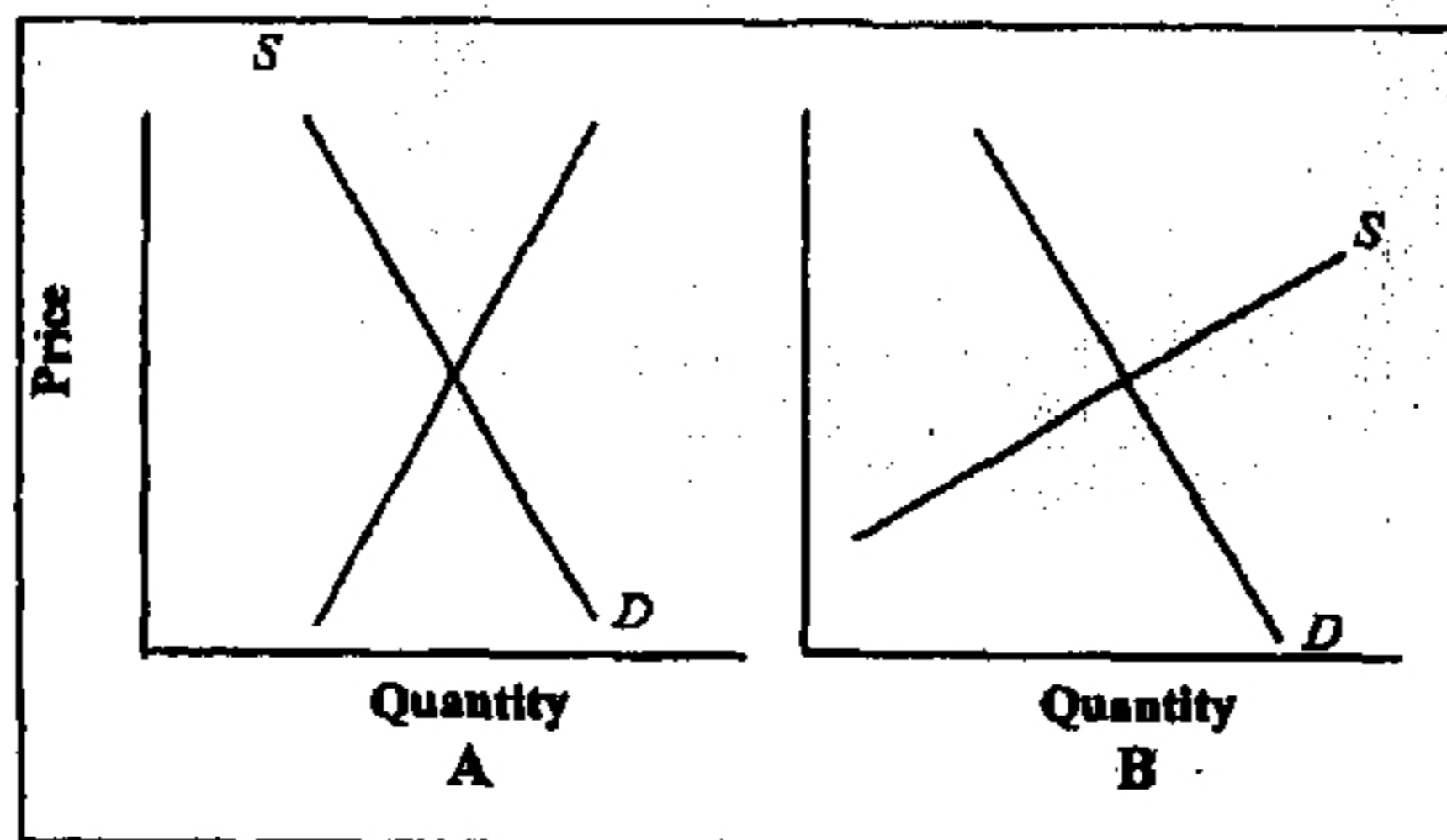| 考 試 科 目	經濟學	所 別	4182 風管系, 管理組	考 試 時 間	3月16日 星期日 第 1 節

本科目之選擇題請在答案卡上作答

I. Multiple Questions (單選題，每題五分)

1. Suppose a worker at a computer company rearranges existing machines and labor and increases production in the process. Using the production function, with output on the vertical axis and labor on the horizontal axis, this would be described as

    a. an upward shift of the curve combined with an upward movement along the curve.
    b. a movement upward along the curve.
    c. a movement downward along the curve.
    d. a downward shift of the curve.
    e. an upward shift of the curve.

2. Because marginal product decreases as input is increased

    a. nothing is implied about how much input is required to produce one more unit of output.
    b. it takes decreasing amounts of input to produce one more unit of output.
    c. it takes increasing amounts of input to produce one more unit of output.
    d. the amount of input it takes to produce one more unit of output does not change.
    e. it takes zero input to produce one more unit of output.

3. With monopolistic competition, market demand is

    a. constantly changing.
    b. horizontal.
    c. the same as firm demand.
    d. nonexistent.
    e. like any other market demand.

4. Reputation and cooperation are more difficult to achieve when

    a. firms find it difficult to observe the behavior of other firms.
    b. a game is repeated.
    c. there are only two firms as opposed to having three or more firms.
    d. firms can easily observe what the others are doing.
    e. firms act out of their own self-interest.

備 考	試 題 隨 卷 繳 交

命 題 委 員 ：　　　　　　　　　　　　　　　　　　（簽章）　　　年　　　月　　　日

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5. The chance a firm takes in defecting from a cooperative solution to a game is that
   a. the firm will immediately suffer lower profits as a result of defecting.
   b. the noncooperative solution causes profits to fall.
   c. cooperation will result in lower profits in the future.
   d. cooperation will be difficult to reestablish and profits will be sacrificed.
   e. all firms know the actions of each other.

6. Refer to the figure below. Which of the following statements is true?
   a. A per-unit tax will result in the greatest reduction of output in the market illustrated in Figure B.
   b. No deadweight loss from a per-unit tax will result in either of the markets illustrated.
   c. A per-unit tax will result in the greatest deadweight loss in the market illustrated in Figure A.
   d. A per-unit tax will result in the greatest loss of consumer surplus in the market illustrated in Figure A.
   e. A per-unit tax will result in the smallest price change in the market illustrated in Figure A.

7. The effect of the personal income tax on the amount of labor employed in the economy is greatest when
   a. demand and supply are both relatively elastic.
   b. demand and supply are both relatively inelastic.
   c. demand is relatively inelastic and supply is relatively elastic.
   d. demand is relatively elastic and supply is relatively inelastic.
   e. both supply and demand do not exist.

| 備 考 | 試 題 隨 卷 繳 交 |

命 題 委 員 :   (簽章)   年   月   日

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8. In looking at the distribution of income provided by quintile statistics and the Lorenz curve, it must be kept in mind that
   a. all individuals with high incomes have a lot of wealth, whereas all individuals with low incomes have very little wealth.
   b. those who are poor generally stay poor, and those who are rich generally stay rich.
   c. when families split up, the two new families formed move down in terms of income into lower quintiles.
   d. income per person is being measured.

9. Radio and television broadcasting services partially avoid a free-rider problem by
   a. using advertising to pay for the services.
   b. converting the services from excludable to nonexcludable goods.
   c. converting the services from private to public goods.
   d. broadcasting unscrambled programs through the air.
   e. charging the government for their services.

10. The Coase theorem works provided that
    a. the transactions costs of an agreement are above a high level.
    b. the transactions costs associated with an agreement are low compared to the costs of the externality itself.
    c. the costs of an externality itself are low compared to the transactions costs of an agreement.
    d. both parties are willing to negotiate with each other.
    e. transactions costs of an agreement are high compared to the costs of the externality itself.

11. Emission taxes have an advantage over taxes on production in that
    a. they change the firm's output whereas taxes on production do not.
    b. the firm's amount of pollution associated with its production will not change.
    c. the firm can use technology to change the amount of pollution associated with its production.
    d. they do not raise the firm's prices whereas taxes on production do.
    e. the firm can increase the amount of pollution associated with a given amount of production.

備 考 試 題 隨 卷 繳 交

命 題 委 員 ： （簽章） 年 月 日

12. Which of the following statements is true when the Fed increases reserves by buying a government bond from a bank?
    a. The amount of reserves in the banking system will increase by an amount greater than the amount of the bond purchase.
    b. The amount of loans made by the banking system will increase by the amount of the bond purchase.
    c. The amount of loans made by that bank will be greater than the increase in reserves.
    d. The amount of deposits made by the banking system will increase by the amount of the bond purchase.
    e. The amount of reserves in the banking system will increase by the amount of the bond purchase.

13. Which of the following statements is true?
    a. Markets respond to consumer preferences, whereas government responds only to societal preferences.
    b. Markets keep costs low out of producers' desires to please people, regardless of cost.
    c. Government keeps costs low due to its moral obligations to voters.
    d. It is safe to assume that government will do what is best for society whereas markets do what is best for owners of businesses.
    e. The lack of profit motive encourages supervisors in government agencies to make decisions concerning employees on the basis of issues other than merit.

II. Firm X and firm Y are the only two Internet providers in a small town. The demand for Internet subscriptions is $P = 60 - Q$. Neither firm X nor firm Y has any fixed costs. The marginal cost of firm X is constant at $10, and the marginal cost of firm Y is constant at $20. Each firm can sell either 10 or 20 subscriptions, and they meet only once in this market.

a. Show your calculations and create the payoff matrix. (6 分)

b. Find the Nash equilibrium or equilibria. (7 分)

c. If there are multiple equilibria, which equilibrium do you think is most likely to occur and why? (7 分)

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III. 在一古董拍賣會中，有貨真價實的「老」古董，也有乍看之下具有價值但實為新品的「新」古董。假設老古董最低願意出售價格為 20 萬元，新古董最低願意出售價格為 15 萬元，而買方願意出價 25 萬元來購買老古董，18 萬元來購買新古董。若在今日之拍賣會中，共有約 80 件古董欲出售，試問老古董約至少有多少件（或佔多少比例），這些老古董的擁有者才會願意割愛？(15分)

備 考	試 題 隨 卷 繳 交

命題委員：　　　　　　　　　　　　　　　　　（簽章）　　　年　　　月　　　日