| 系級	國際經營與貿易學系碩士班	考試時間	100 分鐘
科目	經濟學	本科總分	100 分

一、單選題 (每題3分，共20題60分。答案請作答於答案卷上，並請依序由左至右，五題為一列填寫，共四列。未按此方式書寫答案者，成績結算後，扣總得分10分。)

1. Which of the following is NOT true for monopoly?

  A) The profit maximizing output is the one at which marginal revenue and marginal cost are equal.

  B) Average revenue equals price.

  C) The monopolist's demand curve is the same as the market demand curve.

  D) At the profit maximizing output, price equals marginal cost.

2. Your economics professor has decided that your class will not be graded on a curve but on an absolute scale. Therefore, it is possible for every student in the class to get an "A." Your grade will not depend in any way on your classmates' performance. Based on this information, you decide that you should study economics three hours each day, regardless of what your classmates do. In the language of game theory, your decision to study three hours each day is a:

  A) dominant strategy.   B) minimax strategy.   C) maximin strategy.   D) Prisoner's dilemma.
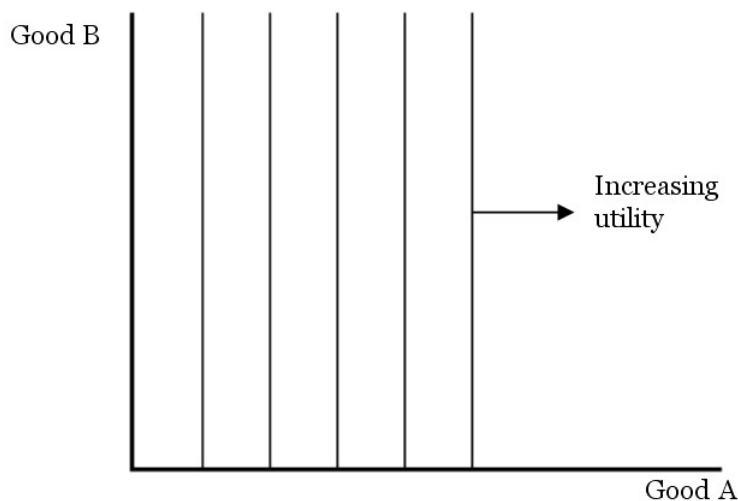
Figure 1

3. Refer to the indifference curve in Figure 1. Which of the following statements is correct?

  A) This individual receives no satisfaction from Good A.

  B) This individual receives no satisfaction from Good B.

  C) This individual will only consume A and B in fixed proportions.

  D) None of the above is correct.

4. Refer to the indifference curve in Figure 1. Which of the following statements about marginal utility (MU) is correct?

  A) $MU_A = 0$.   B) $MU_B = 0$.   C) MU_A is negative.   D) MU_B is negative.

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5. Refer to the indifference curve in Figure 1. Which of the following is true about the MRS?

   A) It is negative.   B) It is positive.   C) It is equal to zero.   D) It is undefined.

6. When a per unit tax is imposed on the sale of a product of a monopolist, the resulting price increase will

   A) always be less than the tax.

   B) always be more than the tax.

   C) always be less than if a similar tax were imposed on firms in a competitive market.

   D) not always be less than the tax.

7. The monopolist has no supply curve because

   A) the quantity supplied at any particular price depends on the monopolist's demand curve.

   B) the monopolist's marginal cost curve changes considerably over time.

   C) the relationship between price and quantity depends on both marginal cost and average cost.

   D) there is a single seller in the market.

8. Which of the following is true of the output level produced by a firm in long-run equilibrium in a monopolistically competitive industry?

   A) It produces at minimum average cost.

   B) It does not produce at minimum average cost, and average cost is increasing.

   C) It does not produce at minimum average cost, and average cost is decreasing.

   D) Either B or C could be true.

9. Which of the following would increase the short-run output effects of a monetary expansion?

   A) an increase in the marginal propensity to consume.

   B) an increase in the interest rate sensitivity of investment.

   C) the IS curve is very flat.

   D) all of the above.

10. If the law of diminishing returns applies to labor then

   A) the marginal product of labor must eventually become negative.

   B) the average product of labor must eventually become negative.

   C) the marginal product of labor must rise and then fall as employment rises.

   D) after some level of employment, the marginal product of labor must fall.

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11. Consider the Matching Pennies game:

	Player B - heads	Player B - tails
Player A - heads	1, -1	-1, 1
Player A - tails	-1, 1	1, -1

Suppose Player A always uses a pure strategy that selects heads, and Player B always uses a pure strategy that selects tails. Is this outcome a Nash equilibrium?

  A) Yes, both players have no incentive to change their actions.

  B) No, Player A would want to switch to tails.

  C) No, Player B would want to switch to heads.

  D) No, Player B would want to switch to tails.

12. What describes the graphical relationship between average product and marginal product?

  A) Average product cuts marginal product from above, at the maximum point of marginal product.

  B) Average product cuts marginal product from below, at the maximum point of marginal product.

  C) Marginal product cuts average product from above, at the maximum point of average product.

  D) Marginal product cuts average product from below, at the maximum point of average product.

13. Joe owns a coffee house and produces coffee drinks under the production function q = 5KL where q is the number of cups generated per hour, K is the number of coffee machines (capital), and L is the number of employees hired per hour (labor). What is the marginal product of labor?

  A) MP = 5.   B) MP = 5K.   C) MP = 5L.   D) MP = 5K/L.

14. A farmer uses M units of machinery and L hours of labor to produce C tons of corn, with the following production function $C = L^{0.5} + M^{0.75}$. This production function exhibits

  A) decreasing returns to scale for all output levels.

  B) constant returns to scale for all output levels.

  C) increasing returns to scale for all output levels.

  D) no clear pattern of returns to scale.

15. Is there a first-mover advantage in the Bertrand duopoly model with homogenous products?

  A) Yes, first-movers always hold the advantage over other firms.

  B) Yes, first-movers may have an advantage, but it depends on the model assumptions.

  C) No, first-movers cannot choose a profit maximizing quantity because the second-mover can always produce a bit less and earn higher profits.

  D) No, the second-mover would be able to set a slightly lower price and capture the full market share.

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16. Suppose oil prices rise and short-run aggregate supply decreases. If the Fed responds by increasing the quantity of money, then in the short run

   A) real GDP increases and the price level falls.

   B) real GDP increases and the price level rises still higher.

   C) the Fed is more concerned about fighting inflation than unemployment.

   D) None of the above answers is correct.

17. An increase in the expected inflation rate leads to _____ the short -run Phillips curve.

   A) a movement upward along   B) a movement downward along

   C) an upward shift of   D) a downward shift of

18. The short-run aggregate supply curve

   A) shows what each producer is willing and able to produce at each level of income holding constant potential GDP and all resource prices.

   B) shows the relationship between aggregate production and the price level holding constant potential GDP and all resource prices.

   C) becomes vertical if there is excess production capacity within the economy.

   D) shows a negative relationship between the price level and real national income holding constant potential GDP and all resource prices.

19. The short-run aggregate supply curve is upward sloping because

   A) a lower price level creates a wealth effect.

   B) lower taxes motivate people to work more.

   C) money wage rates do not immediately change when the price level changes.

   D) most business firms operate with long-term contracts for output but not labor.

20. Which of the following does NOT shift the short-run aggregate supply curve?

   A) a change in the money wage rate

   B) technological progress

   C) a reduction in the price of a raw material

   D) a change in the price level

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二、簡答與計算 (共 40 分。答案題號務必標示清楚，題號標示不清者，不給分。)

1. A monopolist's demand curve is given by P = 500 - 2Q. Its current price is \$300 and it sells 100 units of output.

a). Calculate the monopolist's marginal revenue at the current price and quantity using the expression for marginal revenue that utilizes the price elasticity of demand. (10分)

b). Assuming that the firm's marginal cost is zero, is the firm maximizing profit? (5分)

2. Explain the following terms with one example each.

a). adverse selection (5分).

b). moral hazard (5分)

c). principal–agent problem (5分)

3. The short-run equilibrium condition that Y = C+ I + G + NX can be reinterpreted as follows. First, subtract C from both sides to get Y – C = I + G + NX. Also, Y – C = S + T, where S is saving and T is tax. Now combine the two equations to obtain S + T = I + G + NX.

a). Please construct a diagram with real GDP measured on the horizontal axis. Draw two lines, one for S + T and the other for I + G + NX. How to explain the point where the two lines cross? (7分)

b). Explain what will happen if investment spending increases by the diagram constructed. (3分)