

國立中山大學 115 學年度金融創新產業碩士專班招生考試試題
科目名稱:經濟學

※本科目依簡章規定「不可以」使用計算機，以下題目包括兩部分，共有單選題及填充題。(請直接寫出答案，不用列出計算過程)

Part I: Multiple Choice Questions (4% each, 68%)

答案請填寫在答題卷，並非在此試題卷。

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(11)	(12)	(13)	(14)	(15)	(16)	(17)			

1. Since the trucking industry produces pollutants through vehicle exhaust, which of the following is true?
 - (A) the supply curve of trucking services overstates the true cost of providing those services.
 - (B) the demand curve for trucking services overstates the true benefit of providing those services.
 - (C) the market for trucking services will always be away from equilibrium by an amount equal to the value of the externality.
 - (D) the supply curve of trucking services understates the true cost of providing those services.
 - (E) the demand curve for trucking services understates the true benefit of providing those services.
2. In insurance markets, the problem of adverse selection leads to which of the following outcomes?
 - (A) healthy people become more likely to buy insurance than unhealthy people, which drives premiums up, which drives even more unhealthy people away from the market even though they are the ones who need it most.
 - (B) people choose inappropriate or inadequate coverage because they do not understand the complex information in the policies.
 - (C) unhealthy people become more likely to buy insurance than healthy people, which drives premiums up, which drives even more healthy people away from the market.
 - (D) people choose too much coverage because they do not understand the complex information in the policies.
 - (E) people choose too little coverage because they do not understand the complex information in the policies.

3. Gasoline and bicycles are substitutes for consumers. If the federal gasoline tax is raised to \$1 per gallon, what initial changes occur as the related markets move toward a new general equilibrium?
- (A) Gasoline price rises, demand for bicycles shifts leftward.
 - (B) Gasoline price rises, and there is a move upward along the bicycle demand curve.
 - (C) Gasoline price rises, demand for bicycles shifts rightward.
 - (D) Gasoline price rises, and there is a move downward along the bicycle demand curve.
 - (E) Nothing changes
4. Suppose you win a contest and may choose one of two prizes. Prize 1 pays \$200 now and \$200 one year later. Prize 2 pays \$100 now and \$325 one year later. At what interest rate, if any, would the two prizes have the same present value?
- (A) 10 percent
 - (B) none of the above
 - (C) 25 percent
 - (D) 5 percent
 - (E) 0 percent
5. Under which of the following market structures is it assumed that there are barriers to entry ?
- (A) Monopoly
 - (B) Perfect competition
 - (C) Monopolistic competition
 - (D) B and C only
 - (E) all of the above
6. Instead of charging all customers the same price, a firm charges men a higher price and women a lower price. What is the firm doing by using this pricing strategy?
- (A) is trying to reduce its costs and therefore increase its profit.
 - (B) is engaging in an illegal activity that is prohibited by the Sherman Antitrust Act.
 - (C) is attempting to convert consumer surplus into producer surplus.
 - (D) Both A and B are correct.
 - (E) is attempting to convert producer surplus into consumer surplus.
7. Patent rights are commonly used by firms as:
- (A) barrier to entry.
 - (B) attract competitors
 - (C) way to achieve perfect competition.
 - (D) barrier to exit.

(E) none of the above

8. The short run refers to:

- (A) however long it takes to produce the planned output.
- (B) a time period in which at least one set of outputs has been decided upon.
- (C) less than a year.
- (D) three years.
- (E) a time period in which at least one input is fixed.

9. When a bank borrows funds from a Federal Reserve Bank, the interest rate it pays is known as:

- (A) the discount rate.
- (B) the reserve availability rate.
- (C) the prime rate.
- (D) the Fed funds rate.
- (E) mobility rate

10. Fractional reserve banking is a system in which:

- (A) allows banks not to join the Federal Reserve System.
- (B) allows banks to keep smaller reserves than their deposits.
- (C) allows banks not to insure their deposits.
- (D) limits banks' activities from crossing state lines.
- (E) attract customers' attention

11. In the Keynesian framework, which curve is vertical?

- (A) AD
- (B) LRAS
- (C) SRAS
- (D) NS
- (E) none

12. In the classical IS-LM/AD-AS model, a favorable productivity shock would cause output, the real interest rate, and the price level to _____, respectively.

- (A) increase; increase; decrease
- (B) decrease; decrease; increase
- (C) increase; decrease; increase
- (D) increase; decrease; decrease
- (E) increase; increase; increase

13. In general equilibrium, when the effective tax rate on capital increases, what happens to the real interest rate and the price level?
- (A) fall; fall
 - (B) rise; rise
 - (C) rise; fall
 - (D) fall; rise
 - (E) constant; constant
14. Which statement about M1 and M2 is false?
- (A) Transaction accounts are part of M1.
 - (B) Transaction accounts are part of M2.
 - (C) M2 is more liquid than M1.
 - (D) M2 is larger than M1.
 - (E) A and B are both correct
15. Without productivity growth, what happens in a steady-state economy?
- (A) output per worker and consumption per worker both grow over time.
 - (B) output per worker remains constant over time, but consumption per worker grows over time.
 - (C) output per worker grows over time, but consumption per worker remains constant over time.
 - (D) output per worker and consumption per worker remain constant over time.
 - (E) output per worker and consumption per worker both reduce overtime
16. Suppose a Japanese firm sells 200 VCRs to a French firm and then uses the proceeds to purchase U.S. government bonds. What happens to Japan's trade balance and financial account balance?
- (A) falls; rises
 - (B) falls; falls
 - (C) rises; rises
 - (D) rises; falls
 - (E) constant; constant
17. What is the effect of a higher personal income tax rate on interest income?
- (A) decrease desired saving because the expected real after-tax interest rate falls.
 - (B) increase desired saving because the expected real after-tax interest rate falls.
 - (C) increase desired saving because the expected real after-tax interest rate rises.
 - (D) decrease desired saving because the expected real after-tax interest rate rises.
 - (E) desired saving keep constant

Part II: Fill in the following blanks (4% each, 32%)

答案請填寫在答題卷，並非在此試題卷。

(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
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Q1. Assume the marginal product of labor is: $MPN = 200 - 0.5N$ where N denotes aggregate employment. Labor supply is $100 + 4w$, where w is the real wage.

18. If the government sets a minimum wage of 60, how much unemployment will be created among unskilled workers?
19. If the government sets a minimum wage of 60, what is the quantity of employment?

Q2. Clarke Mementos produces small figurines and sells them to retailers nationwide. The firm sells each figurine for \$5.00 and treats this price as given. Its production function is: $Q = 60L - 0.5L^2$, where Q is daily output of figurines and L is the number of skilled workers employed per day. The corresponding average and marginal products of labor are:
 $AP = 60 - 0.5L$ $MP = 60 - L$

20. Derive the firm's marginal revenue product.
21. If Clarke pays each skilled worker \$150 per day, including fringe benefits, how many workers should it hire?
22. Suppose Clarke must raise total daily compensation to \$200 per skilled worker in order to remain competitive, because its artisans are highly skilled and mobile. How many workers should it hire?

Q3. A monopolistically competitive firm uses the markup rule $P = 1.25MC$, where MC is the marginal cost of an additional unit. The demand curve for its product is $Q = 2000 - 0.1P$, and revenue from selling Q units is given by $PQ = 20000Q - 10Q^2$.

23. If marginal cost is \$10,000 per unit, find the product price

24. If marginal cost is \$10,000 per unit, find the output quantity

Q4: Barbara operates as a producer in a monopoly market. Her demand curve, total revenue curve, marginal revenue curve, and total cost curve are:

$$Q = 160 - 4P \quad TR = 40Q - 0.25Q^2 \quad MR = 40 - 0.5Q \quad TC = 4Q \quad MC = 4$$

25. how much profit will Barbara earn?