

系所組別： 都市計劃學系甲組

考試科目： 經濟學

考試日期： 0307，節次： 2

※ 考生請注意：本試題 可 不可 使用計算機**Part I: Multiple Choice (Choose the best answer for each question, 3 points each)**

1. Rent seeking behavior by a monopolist means
 - A) searching for reduced rent on plant space.
 - B) making loans to other businesses.
 - C) pursuing an economic profit by price discriminating.
 - D) pursuing an economic profit by creating a monopoly.

2. If the Fed sought to increase the quantity of money then the Fed should
 - A) raise the discount rate and buy securities in the open market.
 - B) raise the required reserve ratio and sell securities in the open market.
 - C) lower the discount rate and raise the required reserve ratio.
 - D) lower the discount rate and buy securities in the open market.

3. A single-price monopoly will set its price according to which of the following rules?
 - A) $P = MR$ and MR equals MC .
 - B) P equals MC where the MC curve crosses the demand curve.
 - C) P equals MR where the MR curve crosses the demand curve.
 - D) None of the above answers is correct.

4. A firm's long-run average cost curve
 - A) shows the lowest attainable average total cost of producing any level of output when capital and labor are fixed.
 - B) is the sum of all of its short-run average cost curves.
 - C) tells the firm which plant size to use and which quantity of labor to use to minimize the cost of producing any level of output.
 - D) All of the above.

5. When long-run average cost decreases as output increases there are definitely
 - A) increasing marginal returns.
 - B) economies of scale.
 - C) Both of the above.
 - D) Neither of the above.

(背面仍有題目,請繼續作答)

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6. Economies of scope are cost reductions achieved by
- A) the production of multiple, related products.
 - B) the production of large amounts of a single product.
 - C) limiting the size of the firm.
 - D) increasing firm size.
7. If the number of people unemployed is 100, the number of people employed is 1000, and the working-age population is 1400, then the labor force participation rate is
- A) 78.6 percent.
 - B) 71.4 percent.
 - C) 64.3 percent.
 - D) 66.6 percent.
8. Suppose the Consumer Price Index for the year 2000 is 143.6. What does that number mean?
- A) On average, goods cost \$143.60 each in 2000.
 - B) On average, goods cost \$243.60 each in 2000.
 - C) Prices rose 143.6 percent over the reference base period, on average.
 - D) Prices rose 43.6 percent over the reference base period, on average.
9. The correct ranking of the four basic market structures from low HHI to high HHI is
- A) perfect competition, oligopoly, monopolistic competition, monopoly.
 - B) monopoly, oligopoly, monopolistic competition, perfect competition.
 - C) perfect competition, monopolistic competition, oligopoly, monopoly.
 - D) monopoly, monopolistic competition, oligopoly, perfect competition.
10. To maintain a price floor, the government needs to do any of the following things EXCEPT
- A) enforce the price floor, with penalties imposed on those who are caught selling the good at a price below the price floor.
 - B) advertise the good to increase demand.
 - C) grant subsidies to increase production of the good.
 - D) purchase the good directly.

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11. Which type of unemployment increases during a recession?
- A) Cyclical unemployment.
 - B) Frictional unemployment.
 - C) Structural unemployment.
 - D) The natural rate of unemployment.
12. Joe consumes pizza and movies. Pizza and movies are substitutes. If the price of a pizza rises then
- A) the demand curve for pizza shifts leftward.
 - B) the demand curve for pizza shifts leftward and the demand curve for movies shifts rightward.
 - C) there is an upward movement along the demand curve for pizza.
 - D) there is an upward movement along the demand curve for pizza and the demand curve for movies shifts rightward.
13. The supply of oil is more elastic than the demand for oil. If oil is taxed \$10 per barrel, how will the tax be divided between the buyer and seller?
- A) The seller will pay more of the tax than the buyer.
 - B) The buyer will pay more of the tax than the seller.
 - C) The seller and buyer will split the tax evenly.
 - D) The seller will pay the entire tax.
14. In the long-run, a monopolistically competitive firm finds that
- A) it earns a positive economic profit.
 - B) only a normal profit is earned.
 - C) entry of new firms occur when economic losses are being incurred.
 - D) the firm produces the capacity amount of output.
15. Which of the following expenditures associated with the production of a new high-performance SUV will be included in GDP?
- A) the sale of bonds to finance the construction of the assembly plant.
 - B) the purchase of used welding robots to assemble to vehicles.
 - C) the purchase of new tires to be installed on the new vehicles.
 - D) the purchase of new machine tools to manufacture the engines.

(背面仍有題目,請繼續作答)

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16. All of the following statements are true for a linear demand curve EXCEPT
- A) the price elasticity of demand at the midpoint equals one.
 - B) the price elasticity of demand varies from zero at the quantity intercept to infinity at the price intercept.
 - C) the demand curve is elastic above the midpoint.
 - D) the arc elasticity formula is more appropriate than the point elasticity formula.
17. According to Nobel laureate Ronald Coase, firms exist in order to
- A) maximize transactions costs.
 - B) minimize transactions costs.
 - C) maximize transactions.
 - D) employ workers.
18. The market structure in which a large number of firms compete by making similar but slightly different products is called
- A) monopoly.
 - B) monopolistic competition.
 - C) perfect competition.
 - D) oligopoly.
19. The money aggregate M1 consists of
- A) currency and savings accounts.
 - B) currency and demand deposits, including traveler's checks.
 - C) only demand deposits and time deposits.
 - D) checking accounts, savings accounts and Treasury bills.
20. In the short run, a perfectly competitive firm will shut down if
- A) it incurs any economic loss.
 - B) price equals average cost.
 - C) total revenue is less than total variable cost.
 - D) total revenue is less than total fixed cost.

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※ 考生請注意：本試題 可 不可 使用計算機**Part II: Essay Question (40 points)**

1. (Total 26 points) Marginal utilities for a consumer are given by

$$MU_x = \frac{0.5\sqrt{y}}{\sqrt{x}}$$

$$MU_y = \frac{0.5\sqrt{x}}{\sqrt{y}}$$

- What is the marginal rate of substitution (MRS_{yx}) for this consumer? (5 points)
- Derive the consumer's demand functions for X and Y. (8 points)
- What fraction of her total income does this consumer spend on X? (4 points)
- What is the own-price elasticity of demand for X for this consumer? Briefly justify. (4 points)
- Suppose relative prices remain fixed. Show that the ratio of Y consumed to X consumed remains constant as income changes. Sketch preferences and an income-consumption path that would produce this kind of behavior. (5 points)

2. (Total 14 points) You are given the following information about the economy of MARS: Autonomous consumption expenditure \$1 billion and the marginal propensity to consume is 0.9. Investment (I) is \$5 billion, government purchases of goods and services (G) are \$4 billion, and net taxes (T) are a constant \$4 billion – they do not vary with income.

- What is the consumption function (C)? (3 points)
- What is the equation that describes the aggregate expenditure curve (AE)? (4 points)
- Calculate equilibrium expenditure. (3 points)
- If investment falls to \$3 billion, what is the change in equilibrium expenditure? (4 points)