國立中央大學94學年度碩士班考試入學試題卷 共之頁 第 / 頁 所別:企業管理學系碩士班一般類組(於組)科目:經濟學

- 一、是非題 (共 30 分, 每題 6 分): 請針對以下各題回答「對」或「錯」,並簡單說明你的理由, 若無解釋則該題將不予計分。
 - 1. The actual real interest rate and expected real interest rate are always equal.
 - 2. At the natural rate of unemployment, no one is unemployed.
 - 3. If the supply curve is perfectly elastic, a per unit tax doesn't reduce producer surplus.
 - 4. When a monopolistically competitive firm raises its price, quantity demanded falls to zero.
 - 5. The market price in a perfectly competitive industry in short-run equilibrium is \$3 and the minimum average cost for all firms is \$2.5. In the long run, we would expect an increase in each firm's output.

二、選擇題 (共 30 分, 每題 5 分):

- 1. As a result of heavy spring rains in Taiwan, the rice crop declined sharply. If rice growers experienced an increase in sales revenue, the demand for rice must be
 - (a) price elastic.
 - (b) price inelastic.
 - (c) unitary elastic
 - (d) perfectly inelastic.
- 2. The irrelevance of monetary changes for real variables is called
 - (a) the classical dichotomy.
 - (b) the equation of exchange.
 - (c) monetary neutrality.
 - (d) hyperinflation.
- 3. Internalizing an externality means
 - (a) the good becomes a public good.
 - (b) government regulations or taxes are sufficient to eliminate the externality completely.
 - (c) government imposes regulations that eliminate the externality completely.
 - (d) incentives are altered so that people take account of the external effects of their actions.
- 4. Which of the following explains why long-run average cost at first decreases as output increases?
 - (a) gains from specialization of inputs
 - (b) diseconomies of scale
 - (c) less-efficient use of inputs
 - (d) fixed costs becoming spread out over more units of output

注:背面有試題意

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- 5. When an agent lacks an incentive to promote the best interests of the principal, and the principal cannot observe the actions of the agent, there is said to be
 - (a) an optimal contract.
 - (b) monitoring.
 - (c) a separating equilibrium.
 - (d) moral hazard.
- 6. If different nations have significantly different government policies, then the currently poorer nation must
 - (a) grow more rapidly than the richer nation.
 - (b) grow more slowly than the richer nation.
 - (c) be farther from its steady-state than the richer nation.
 - (d) None of the above.

三、計算與問答題 (共 40 分):

1. (25 分) TSMC is the sole producer of wafers. TSMC operates two plants with the following total cost functions:

$$TC_A = 2q_A^2$$
 $TC_B = q_B^2$

TSMC sells wafers to two groups of firms with different demand curves:

$$q_1 = 340 - 2p_1 \qquad q_2 = 200 - p_2$$

TSMC may sell wafers from either plant to either group of firms.

- (a) If TSMC can price discriminate between the two groups of firms, how many wafers will it produce and sell?
- (b) How does it allocate production between the two plants?
- (c) What price does it charge each group of firms?
- (d) How many wafers does each group of firms purchase?
- (e) How much profit does TSMC earn?
- 2. (15 \Re) John lives for two periods. In period one he earns Y_1 and in period two he earns Y_2 . His intertemporal utility function is $U(C_1, C_2) = u(C_1) + 0.8u(C_2)$ and the interest rate is 5%. Assume that u' > 0 and u'' < 0.
 - (a) Write down John's maximization problem.
 - (b) Does John consume more in period one or period two?
 - (c) If John gets all of his income in the first period, what happens to consumption in each period if the interest rate falls.

