

招生學年度	101	招生類別	碩士班
系所班別	運籌管理研究所碩士班(甲組)		
科目	經濟學		
注意事項	本考科可使用掌上型計算機		

選擇題

1. (4%) If the Federal Reserve System lowers the reserve requirement
  - a. money supply rises
  - b. money supply falls
  - c. money supply remains constant
  - d. nothing changes
  - e. not sure
  
2. (4%) According to Keynesian theory, which combination of policies below is consistent (that is, the policies would tend to reinforce instead of offset each other)?
  - a. Decrease taxes; increase government spending; increase the money supply
  - b. Decrease taxes; decrease government spending; increase the money supply
  - c. Decrease taxes; increase government spending; decrease the money supply
  - d. Increase taxes; increase government spending; increase the money supply
  - e. Increase taxes; decrease government spending; increase the money supply
  
3. (4%) John Maynard Keynes wrote
  - a. Das Kapital
  - b. The Wealth of Nations
  - c. Rich Man, Poor Man
  - d. The General Theory of Employment, Interest and Money
  - e. None of above
  
4. (4%) Suppose the nominal price of oil in 1984 was \$30 per barrel when the consumer price index was 100. What is the real price of oil today, assuming it was \$30 per barrel in 1984? (You can assume that today's price of oil is \$100 per barrel and today's price index is 200.)
  - a. \$50 per barrel.
  - b. \$40 per barrel.
  - c. \$35 per barrel.
  - d. \$30 per barrel.
  - e. \$25 per barrel.

簡答題(Short Answer)

1. (8%) Can the leader ever get a lower profit in a Stackelberg equilibrium than he would get in the Cournot equilibrium? Why?
  
2. (8%) 若一個廠商為價格的接受者，說明其所處的市場特性。
  
3. (8%) 有位經濟學者說一張 200 元的折價券不同於 200 元現金折扣，因為折價券是差別取價的原理。說明你/你同意與否的理由。

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## 計算題

1. (20%) DD airlines flies only one route: City A to City B. The demand for each flight on this route is  $Q=500-P$ . DD's cost of running each flight is \$30,000 plus \$100 per passenger
- (a) What is the profit-maximizing pricing DD will charge? How many people will be on each flight? What would DD's profit be for each flight? (10%)
- (b) If the market manager reports show that there are two different types of passengers of each flight. Type A, the business people who have a demand of  $Q_a = 260 - 0.4 * P$ . Type B is tourists whose total demand is  $Q_b = 240 - 0.6 * P$ . The tourists are easy to spot, so DD CEO decides to charge them different pricing. What the prices for these two types of customers should be? And what is the profit for each flight. (10%)
2. (20%) Suppose the highway bus industry consisted of only two firms: AA and BB. Let the two firms have identical cost functions,  $C(q) = 40 * q$ . Assume the demand curve for the industry is given by  $P = 100 - Q$ , and each firm expects the other to behave as a Cournot competitor.
- (a) Calculate the Cournot-Nash equilibrium for each firm assuming that each chooses the output level that maximized its profits taking it's rival's output as given. What are the profits of each firm? (5%)
- (b) What would be equilibrium quantity of BB had constant marginal and average costs of 25 and AA had constant marginal and average costs of 40? (10%)
- (c) Assuming that both firms have the original cost function,  $C(q) = 40 q$ , how much should BB be willing to invest to lower its marginal cost from 40 to 25, assuming that AA will not follow suit? (5%)
3. (20%) 假定兩人賽局之償付矩陣如下

		B	
		b1	b2
A	a1	(Pa, 5)	(5, 2)
	a2	(10, 11)	(2, Pb)

- (a) 若(a1, b1)爲此一賽局之優勢策略均衡(dominant strategy equilibrium), 試求 Pa 和 Pb 值的範圍。(10%)
- (b) 若(a1, b1)爲此一賽局之 Nash 均衡, 試求 Pa 和 Pb 值的範圍。(10%)