國立臺北大學 110 學年度碩士班一般入學考試試題

系（所）組別：企業管理學系甲組
科　　　目：經濟學

☐可　☑不可使用計算機

一、選擇題 (4 points each, 40 points in total)

1. Policy makers and citizens who want to expand the size of the government sector would favor stabilization policies that
   (A) raise G to eliminate a recessionary gap and lower taxes to eliminate an inflationary gap.
   (B) raise G to eliminate a recessionary gap and raise taxes to eliminate an inflationary gap.
   (C) reduce taxes to eliminate a recessionary gap and raise G to eliminate an inflationary gap.
   (D) reduce taxes to eliminate a recessionary gap and reduce G to eliminate an inflationary gap.

2. Which of the following will shift the aggregate demand curve outward?
   (A) tax cuts and government spending cuts
   (B) tax increases and government spending increases
   (C) tax cuts and government spending increases
   (D) tax increases and government spending increases

3. The required reserve ratio is 10 percent, but banks actually keep 20 percent on reserve. The actual money multiplier will be
   (A) 10.　　(B) 9.　　(C) 5.　　(D) 2.　　(E) 1.

4. Are funds available on a credit card included in a definition of the money supply?
   (A) Yes, because these funds can be used to pay for goods and services.
   (B) Yes, because these funds are included in M_2.
   (C) No, because these funds are hard to measure total credit card spending.
   (D) No, because these funds are not a store of value.

5. Stock prices fell throughout much of 2000 and 2001 and many investors decided to switch their funds into the bond market. What only about 30 percent of surveyed investors knew was that as bond prices rise, interest rates
   (A) fall in reaction to the increased demand for bonds.
   (B) fall in reaction to the decreased demand for bonds.
   (C) rise in reaction to the increased demand for bonds.
   (D) rise in reaction to the decreased demand for bonds.

6. Why does the Fed have imperfect control over the money supply?
   (A) Because the Fed does not know how much reserves will change when it buys or sells securities.
   (B) Because of unpredictable changes in the public's desire to hold cash and banks' desires to hold reserves.
   (C) Because of unpredictable changes in reserve requirements.
   (D) Because of the secrecy of FOMC meetings, which lead to policy surprises.

7. Which of the following leads to a fundamental difficulty for stabilization policy?
   (A) Time lags in policy decisions
   (B) Presence of shock absorbers in the economy
   (C) Absence of data on the effectiveness of policy measures
   (D) Existence of self correcting mechanism

8. Crowding out can best be defined as
   (A) higher interest rates caused by restrictive monetary policy, which reduces investment.
   (B) higher interest rates caused by restrictive monetary policy, which increases saving and reduces consumption spending.
   (C) government budget deficits causing a drop in private borrowing because of higher interest rates.
   (D) government budget deficits causing a drop in interest rates, which reduces private saving.

9. If fluctuations in economic activity come from the supply side, higher inflation is associated with
   (A) lower interest rates.　　(B) structural deficits.
   (C) higher rates of unemployment.　　(D) lower rates of unemployment.

10. If U.S. interest rates rise while foreign interest rates remain unchanged,
   (A) GDP will not change since the shift in aggregate supply cancels the positive effects on aggregate demand.
   (B) the dollar will depreciate and thus reduce prices and output.
   (C) foreign capital will be attracted to the United States and the dollar will appreciate.
   (D) net exports will increase and the economy will expand.

二、簡答題 (10 points)

1. Suppose the economy of Country A is as follows:
   C = 200 + .8DI (DI = disposable income)
   I = 300 + .2Y – 50r (Y = GNP)
   (r, the interest rate, is measured in percentage points. For example, a 9 percent interest rate is r = 9).

   For this economy, assume that the Federal Reserve uses its monetary policy to peg the interest rate at
   r = 5.
   G = 750
   T = .25Y
   X = 200
   M = 150 + .2Y
   Hint: DI = Y – T

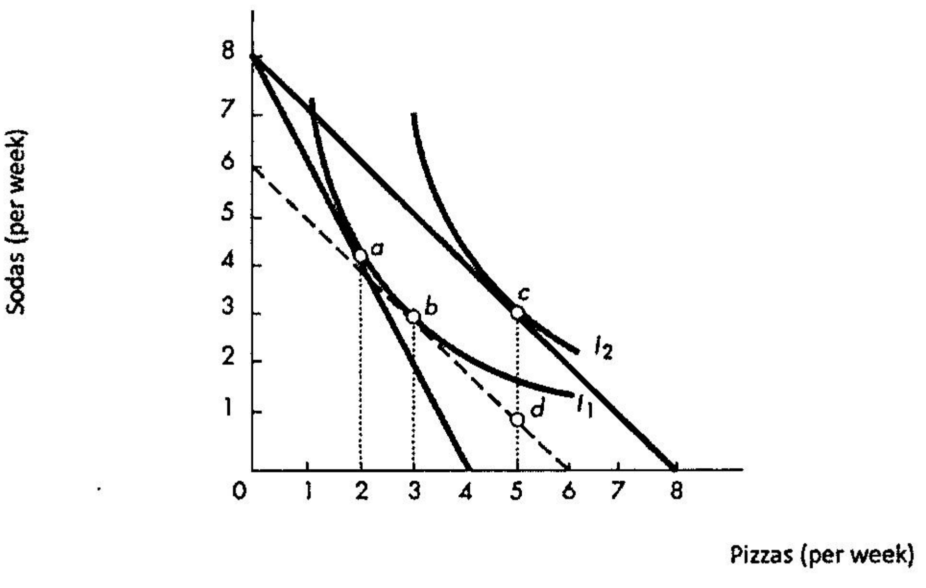
   (1) The equilibrium GDP for Country A is :_______ (3 points)
   (A) 3,000　　(B) 2,950　　(C) 2,625　　(D) 2,525

   (2) The budget deficit or surplus for Country A is :_______ (3 points)
   (A) 125.50　　(B) –93.75　　(C) –126.25　　(D) –154.75

   (3) The trade deficit or surplus of Country A is :_______ (4 points)
   (A) –475　　(B) –450　　(C) –425　　(D) 75

三、Multiple Choices (3 points each, 30 points in total)

1. Sam has made his best affordable choice of sodas and pizzas. He spends all of his weekly income on 15 sodas at $2 each and 2 pizzas at $5 each. Next week, he expects the price of soda to fall to $1 and the price of a pizza to rise to $10. Which statement best reflects the preference of Sam and the changes Sam make in response to the price changes?
   (A) Sam prefer the current price combination. Sam will buy the same sodas and pizzas.
   (B) Sam prefer the price combination next week. Sam will buy more sodas and fewer pizzas
   (C) Sam prefer the price combination next week. Sam will buy more sodas and more pizzas
   (D) Sam prefer the price combination next week. Sam will buy fewer sodas and more pizzas



2. In the figure above, weekly income is $8, the price of a soft drink is $1, and the initial price of a pizza is $2. If the price of a pizza decreases to $1, the substitution effect is the movement from point ____ to point ____.
   (A) a; b　　(B) a; c　　(C) b; c　　(D) b; d

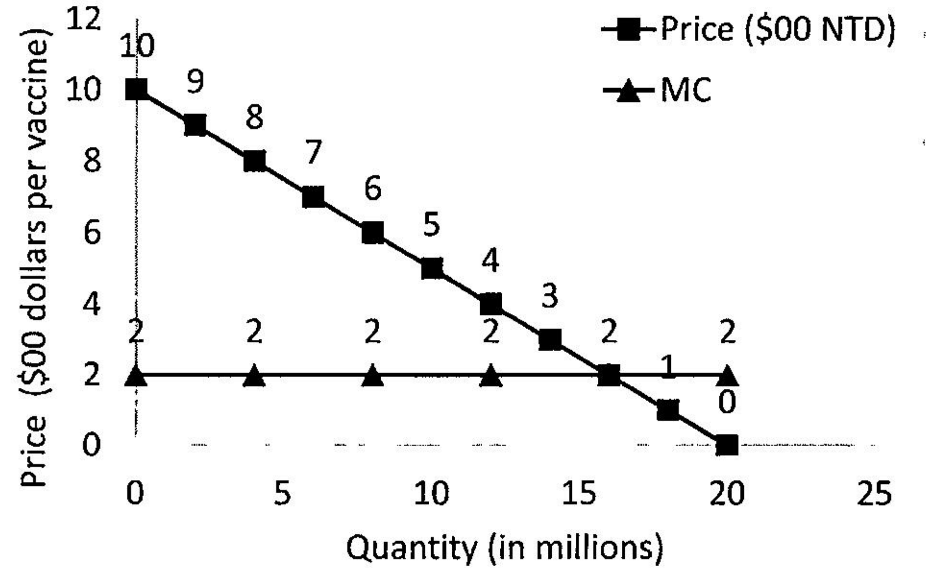
Bottles of Sodas		Slices of Pizzas	
Quantity	Marginal Utility	Quantity	Marginal Utility
1	120	1	80
2	100	2	50
3	80	3	30
4	60	4	20

3. The table above describes Pam's marginal utilities for consumption of sodas and pizzas. If she maximizes her utility by consuming 2 bottles of sodas and 2 slices of pizzas, then the ratio of the price of sodas to the price of pizzas must be
   (A) 1/2　　(B) 3/8　　(C) 8/3　　(D) 2

Output (units)	Average variable cost
0	0
1	18
2	17
3	16
4	15
5	14
6	13

4. The table above gives some cost data for Peter's Fried Chicken. Peter's fixed cost is \$20. The marginal cost of increasing output from 3 to 4 filet of chicken is
   (A) 10　　(B) 12　　(C) 14　　(D) 16

5. In perfect competition, a firm maximizes its economic profit if it produces the output at which ____.
   (A) total revenue equals total cost
   (B) price equals marginal cost
   (C) price equals average cost
   (D) economic profit equals zero in the short run



6. TW Pharmaceuticals has developed the first COVID-19 vaccine, for which they have an exclusive patent. A vaccine can be produced at a constant marginal cost of \$200/vaccine. The demand curve and marginal cost curve for this new vaccine are in the figure above. With its patent giving it a monopoly for its vaccine, if it is a single-price monopoly, TW Pharmaceuticals will
   (A) produce and sell 16 million vaccines at a price of \$200 each.
   (B) produce and sell 10 million vaccines at a price of \$500 each.
   (C) produce and sell 8 million vaccines at a price of \$600 each.
   (D) produce and sell 8 million vaccines at a price of \$200 each.

(Problem 7-8) Five housemates decide that they are renting movies to watch for the weekend. Renting one movie costs \$150 each, and the cost is equally split among the five housemates. (Each housemate needs to pay \$30.) They need to decide on the number of movies that they are going to rent. The willingness to pay for each of the movies are as follows:

	Pam	Sam	Tom	Vera	Xavier
Movie 1	\$140	\$60	\$80	\$60	\$20
Movie 2	\$120	\$40	\$60	\$20	\$0
Movie 3	\$100	\$20	\$40	\$0	\$0
Movie 4	\$80	\$0	\$20	\$0	\$0
Movie 5	\$60	\$0	\$0	\$0	\$0

7. How many movies should they rent to maximize the ***total surpluses*** in the house? How many movies would the ***median*** housemate choose?
(A) 1, 1　　(B) 2, 1　　(C) 3, 1　　(D) 3, 2　　(E) 2, 3

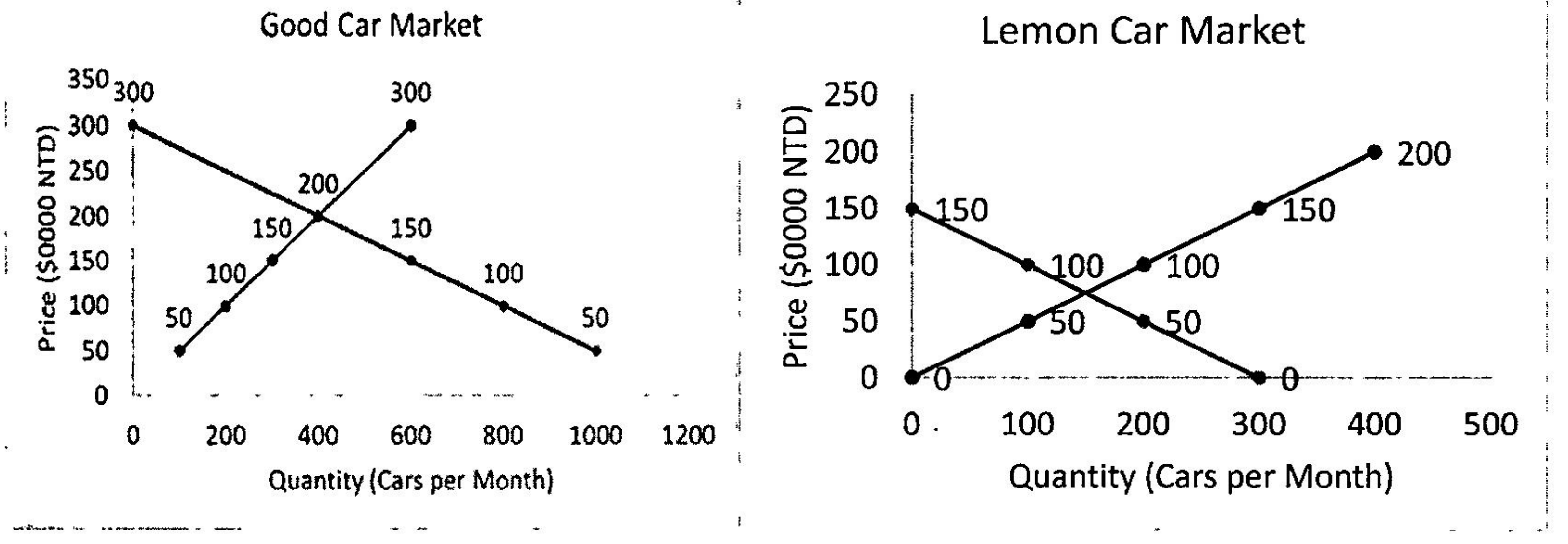
8. Of the two choices (maximizing total surpluses, the median housemate's decision), which would get the most votes among the five housemates? Is it possible to propose another number of movies that will get more votes, when being put to vote against the preferrable decision of the two (maximizing total surpluses, the median housemate's decision)?
(A) Maximizing total surpluses; Yes, it is possible to propose another number that will be preferrable than either of the two.
(B) Median housemate's decision; Yes, it is possible to propose another number that will be preferrable than either of the two.
(C) Maximizing total surpluses; No, it is not possible to propose another number that will be preferrable than either of the two.
(D) Median housemate's decision; No, it is not possible to propose another number that will be preferrable than either of the two.

9. When beverage shop cuts its price for bubble tea to increase the total revenue, it believes that the demand for bubble tea is
(A) elastic　　(B) inelastic　　(C) perfectly elastic　　(D) unit elastic

10. If as output increases marginal cost exceeds average variable cost but is less than average total cost, average total cost ____ and average variable cost ____.
(A) increases; decreases　　(B) increases; increases
(C) decreases; increases　　(D) decreases; decreases

四、Short Answers (20 points. Please answer either in Chinese or English.)

1. A lemon is a car that is found to be defective after it has been bought (i.e. bad-quality used cars). Suppose that there are only two types of used cars in the market: good cars and bad cars. The supply and demand for respective markets are described in the figures below.



A. If consumers cannot distinguish good cars from lemons, what will the equilibrium price be for the entire market? (5 points)

B. How much will the deadweight loss (DWL) be for the society if consumers cannot distinguish good cars from lemons? Please show the deadweight loss (DWL) in a ***figure*** on the answer sheet. **No need for calculations.** (5 points)

2. Before the beginning of COVID-19, the price for a face mask is $2 NTD. After the breakout of COVID-19, due to the heightened demand in face masks, the price rises to $20 NTD each. The government then intervenes and sets the price to $5 NTD per mask.

   A. Assume that supply does not change, ***plot*** supply and demand ***changes*** before and after COVID-19 and ***explain why*** price ceiling is inefficient in allocating masks in a society. (5 points)

   B. Why this government intervention can still be socially efficient after all considering the externalities in wearing face masks? (5 points)