

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

The section of multiple choices has 10 questions and each question is 5 points. The essay section has 2 questions and the points are listed at the end. There are 100 points in total. Please number your answers accordingly.

### **Part A: Multiple Choice Questions (單選題)**

1. The big tradeoff in economics is a tradeoff between
  - a. equity and efficiency.
  - b. equality and inequality.
  - c. marginal cost and marginal benefit.
  - d. Scarcity and opportunity cost.
  
2. According to the principle of comparative advantage, if Taiwan trades with China, most likely,
  - a. the Taiwan will benefit and China will lose.
  - b. the Taiwan will lose and China will benefit.
  - c. neither of the countries will benefit.
  - d. both countries will benefit.
  
3. Ms. Lollipop opened a candy store in December 2013. She rented a building for \$25,000 a year and used \$30,000 from her savings account, which earned an annual interest rate of 5 percent, to buy capital equipment. In December 2014, the market value of her capital equipment was \$26,000. What is the economic depreciation of Lollipop's capital?
  - a. \$3,000
  - b. \$4,000
  - c. \$1,000
  - d. \$25,000
  
4. Mrs. Smith operates a business in a competitive market. The current market price is \$8.10. At her profit-maximizing level of production, the average variable cost is \$8.00, and the average total cost is \$8.25. Mrs. Smith should
  - a. shut down her business in the short run but continue to operate in the long run.
  - b. continue to operate in the short run but shut down in the long run.
  - c. continue to operate in both the short run and long run.
  - d. shut down in both the short run and long run.
  
5. Cheating by a member of a cartel \_\_\_\_\_ consumer surplus and \_\_\_\_\_ the total economic profit earned by *all* the firms in the cartel.
  - a. increases; increases
  - b. increases; decreases
  - c. decreases; increases
  - d. decreases; decreases
  
6. Street lights are a public good. If street lights were provided by the private market, at the equilibrium quantity, it would be the case that
  - a.  $MSB = MSC$
  - b.  $MSC > MC$
  - c.  $MSB > MSC$

d.  $MSB > MB$

7. In the foreign exchange market, if the supply of dollars \_\_\_\_\_ and simultaneously the demand for dollars \_\_\_\_\_, then the exchange rate definitely \_\_\_\_\_.
- increases; increases; depreciates
  - decreases; increases; depreciates
  - increases; decreases; depreciates
  - decreases; decreases; appreciates
8. In 2013, the U.S. credit card balance was \$866 billion. Which of the following is true?
- The \$866 billion balance is part of M2 but not part of M1.
  - The \$866 billion balance is part of both M1 and M2.
  - Only that portion of the \$866 billion actually charged in 2009 is counted in M1 and M2.
  - No part of the \$866 billion balance is counted in M1 and M2.
9. The order for the chain of events for the Keynesian model is for a change in \_\_\_\_\_ to lead to a change in \_\_\_\_\_, which is then multiplied resulting in a change in \_\_\_\_\_.
- investment; animal spirits; the price level
  - business confidence; investment; real GDP
  - the Fed's intermediate targets; the Fed's goals; real GDP
  - real GDP; income; consumption
10. If the economy is at potential GDP and the central makes an open market sale of government securities, in the long run the aggregate \_\_\_\_\_ curve shifts \_\_\_\_\_ and the price level \_\_\_\_\_.
- demand; rightward; rises
  - supply; leftward; rises
  - demand; leftward; falls
  - supply; leftward; falls

### **Part B: Essay Questions**

- Compare “perfect competition” to “perfect price discrimination” on following factors (20)
  - efficiency. (5)
  - consumer surplus. (5)
  - economic profit in the long run. (5)
  - market power. (5)
- Please read the article and answer following questions. (30)

#### **Reducing emissions from aviation (Source: European Commission, 2014)**

Aviation is one of the fastest-growing sources of greenhouse gas emissions. The European Union is taking action to reduce aviation emissions in Europe and working with the international community to develop measures with global reach. Since the start of 2012 emissions from all flights from, to and within the European Economic Area (EEA) - the 28 EU Member States, plus Iceland, Liechtenstein and Norway - are included in the EU Emissions Trading System (EU ETS).

Like industrial installations covered by the EU ETS, airlines receive tradeable allowances covering a certain level of CO<sub>2</sub> emissions from their flights per year. The Commission proposed the inclusion of aviation in the EU ETS after concluding that this was the most cost-efficient and environmentally effective option for controlling aviation emissions. Its decision was based on the results of a wide-ranging consultation of stakeholders and the public and analysis of several types of market-based solutions. Compared with alternatives such as a fuel tax, including aviation in the EU ETS provides the same environmental benefit at a lower cost to society - or a higher environmental benefit for the same cost. In addition to market-based measures, operational measures - such as modernising and improving air traffic management technologies, procedures and systems - also contribute to reducing aviation emissions.

- a) Does “clean air” qualify as a “common resource”? Please explain your answers using the properties of goods. (5)
- b) Please explain “the tragedy of commons” in the context of clean air. (5)
- c) Please use economic concepts to describe the consequences if no mitigation policy is implemented to reduce the carbon emissions into the air. (5)
- d) Please draw a diagram and explain in texts to demonstrate the effect of carbon tax on the quantity and price of aviation travel. Please explain all axis and symbols in details. (5)
- e) Please explain whether the EU ETS policy will help to improve the economic efficiency of aviation travel. (10)