一、Multiple Choice (30%)  
Identify the letter of the choice that best completes the statement or answers the question.

1. When Lana graduated from college and got her first higher-paying job, her purchases of macaroni and cheese fell considerably; for Lana, macaroni and cheese is a(n).
   a. inferior good  
   b. necessity  
   c. luxury  
   d. inverse good  

2. The assumption that humans are always maximizing their own utility means that economists cannot explain.
   a. none of the above  
   b. why people vote  
   c. why parents provide for their children  
   d. charitable donations  

3. After college, Diane turns down an offer for a job that would pay $50,000 per year in order to open her own marketing firm. Her annual office rental is $12,000, secretarial support is $30,000, office supplies and utilities are $5,000, and advertising and other costs are $2,000. In the first year, Diane earns revenues of $75,000. Diane's accounting profit is:
   a. $26,000  
   b. $25,000  
   c. $24,000  
   d. $75,000  

4. After an increasing-cost industry responds to an increase in demand, the long-run equilibrium price will be:
   a. higher  
   b. lower  
   c. the same as before the demand increase  
   d. impossible to predict  

5. Which of the following is an example of price discrimination?
   a. a Burger King in New York City charging more for a hamburger than a Burger King in Manhattan, Kansas charges  
   b. a clothing store offering shirts at ten dollars each or two for fifteen dollars  
   c. a movie theater charging lower ticket prices to children and senior citizens  
   d. a car dealer charging higher prices for cars with air conditioning  

6. Suppose a U.S. automobile manufacturer produced $200 million worth of automobiles in the United States in 2004, but $50 million worth went unsold. How much was the company's contribution to GDP?
   a. $50 million  
   b. $250 million  
   c. $150 million  
   d. $200 million  
   e. $0  

7. Suppose Mike agrees to borrow $100 from Renee for one year at a one-time interest payment of 5%. They both expected the inflation rate to be 2% during the one-year period. However, during that year the inflation rate was actually 1%. Which of the following has occurred?
   a. The unexpectedly low inflation rate has redistributed $1 from Mike to Renee.  
   b. The unexpectedly low inflation rate has redistributed $5 from Mike to Renee.  
   c. The unexpectedly high inflation rate has redistributed $1 from Mike to Renee.  
   d. There has not been any redistribution costs to either party.  
   e. The unexpectedly low inflation rate has redistributed $1 from Renee to Mike.  

8. If prices (as measured by the CPI) fell by one-half and nominal wages fell by one-third, what would happen to real wages?
   a. They would increase.  
   b. They would remain unchanged.  
   c. They would decrease.  
   d. They would fall by one-third.  
   e. They would fall by one-half.
第2節

經濟學試題

9. What is the equilibrium condition in the loanable funds market?
   a. \( S = I^* = G - T \)
   b. \( S = I^* + T - G \)
   c. \( S + I^* = G - T \)
   d. \( S - T = I^* + G \)
   e. \( S + G = I^* - T \)

10. If autonomous consumption decreases, which of the following would occur in the short run?
   a. a decrease in GDP, a decrease in the price level, a decrease in money demand, and a decrease in the interest rate
   b. an increase in GDP, an increase in the price level, an increase in money demand, and an increase in the interest rate
   c. a decrease in GDP, an increase in the price level, an increase in money demand, and an increase in the interest rate
   d. an increase in GDP, a decrease in the price level, a decrease in money demand, and an increase in the interest rate

二、何謂市場失靈？造成市場失靈的原因有哪些？(10%)  

三、何謂所得彈性？經濟學中利用所得彈性的大小，將財貨分為哪幾種？(10%)  

四、凱因斯學派的總合供給曲線與古典模型有何不同？(10%)  

五、假設一廠商的短期總成本曲線是

\[ STC = 100 + 20Q + Q^2 \]

其中總固定成本是 100，而總變動成本是 20Q + Q^2，短期邊際成本曲線 \( SMC = 20 + 2Q \)
試求(a)平均變動成本(AVC)的方程式是什麼？(5%)  
(b)平均變動成本的最低水準為何？(5%)  

六、設有一獨占廠商，P 為價格，Q 為數量，\( e_{Q,P} \) 為需求價格彈性，MC 為邊際成本。

(a) 試求 \( MR = P\left(1 + \frac{1}{e_{Q,P}}\right) \) (5%)  

(b) 由(a)推導反彈性價格法則(inverse elasticity pricing rule, IEPR) (5%)  

\[ \frac{P - MC}{P} = \frac{1}{e_{Q,P}} \]

(c) 若獨占廠商 MC=50，其所面對的商品需求曲線為

\[ P = 100 - \frac{1}{2} Q \]

試利用 IEPR 求出獨占廠商利潤最大的價格與產量(10%)  

七、已知效用函數為

\[ U(X,Y) = X^\frac{1}{2} Y^\frac{1}{2} \] 且 \( P_x = 2 \), \( P_y = 1 \), \( M = 100 \)

試求(a) X、Y 財是否均符合邊際效用遞減法則？(5%)  
(b) 在消費者均衡下，X、Y 各為若干？(5%)