一、計算題（ 21% ）

1. If the demand function for good X is $Q = 50 - \sqrt{P}$, where Q and P are the quantity demanded and price, respectively. Find the price elasticity at P= 100.

2. If the revenue and cost for a monopolist are as followings:

   $TR = 1000Q - 10Q^2$, and $TC = 100Q + 5Q^2$,
   where TR is total revenue, TC is total cost and Q is quantity, Find the profit-maximizing sale price and quantity.

3. If Paul's utility function is $\sqrt{XY}$, X and Y are two goods. The price of good X and Y are \$5 and \$10, respectively. Paul has income \$480.
   Find the maximum utility that Paul can achieve.

4. If $C=150+0.8(Y-T)$, $I=50+0.1Y$, $G=100$, $T=-50+0.2Y$, $X=104$, $M=60$, where C, Y, I, G, T, X, M are consumption, income, investment, government expenditure, tax, export and import, respectively. Find the equilibrium income.

5. If in above question (question 4) the investment becomes $I = 50- 0.2R$, where R is interest rate.
   Find the slope of IS curve.

6. If the demand curve is $Q = 100 - P^2$, and supply curve is $Q= 10 +P$
   Find the consumer's surplus.

7. If the CPI for 1993 and 1994 are 110 and 116, respectively. The CPI for the base year is 100.
   Find the inflation rate of 1994.

二、問答題（ 19% ）

1、a）最近幾個月來美元相對於日元及馬克大幅貶值，你認為是那些因素造成的？

b）新台幣陸陸續續也對美元升值，你認為這又是那些因素造成的？

c）你認為目前新台幣升值對台灣的總體經濟有何利弊之影響？ 8%

2、a）在國貿理論上有所謂的要素稟賦理論（factor endowment theory）及產品週期理論（product-cycle theory），請分別解釋之。

b）請各舉一項台灣的產品說明上述兩個理論。 6%

3、 交通部研議將高速公路通行費採行彈性收費以舒緩擁擠之車潮，試以經濟學的角度來分析此政策的效果。 5%

三、單選題（ 60% ）

1. Suppose the parking authorities at your college campus decide to increase the revenue earned from parking stickers by increasing sticker prices. Which of the following must they believe to be true?
   A. Parking on campus is a luxury.
   B. There are few, if any, substitutes for parking on campus.
   C. The cost of a sticker is a large percentage of your income.
   D. Parking stickers are inferior goods.
   E. Demand for parking on campus is price elastic.

2. Which of the following could shift the demand for a good to the right?
   A. A decrease in income if the good is a normal good.
   B. An increase in income if the good is an inferior good.
   C. A decrease in the good's price if the good is normal.
   D. An increase in the good's price if the good is inferior.
   E. None of the above.

3. Many people argue against increasing the minimum wage because in their opinion the result would be increased unemployment. Which of the following best summarizes this argument? A higher minimum wage would
   A. Increase the supply of labor while decreasing the demand for labor.
   B. decrease the supply of labor while increasing the demand for labor.
   C. increase the quantity supplied of labor while decreasing the quantity demanded of labor.
   D. decrease the quantity supplied of labor while increasing the quantity demanded of labor.
   E. increase the supply of labor while decreasing the quantity demanded of labor.

4. The CPI in a certain year is 131. This means that
   A. inflation has increased 31 percent since the previous year.
   B. prices are 31 percent higher than they were in the previous year.
   C. inflation has increased since the base year by well over 31 percent.
   D. prices on average are 31 percent higher than they were in the base year.
   E. prices are higher than they were in the previous year, but it is not possible to say how much higher.

5. Externalities are defined as
   A. any productive processes external to the firm.
   B. unpriced byproducts of consumption or production that harm or benefit those not involved in the transaction.
   C. policies that firms undertake to sell outside the country.
   D. managers' dealings with managers outside the firm.
   E. none of the above.

6. According to the law of comparative advantage, an individual should produce a good if he or she
   A. has the lowest opportunity cost of producing the good regardless of whether it is produced with the fewest resources.
   B. has the lowest opportunity cost of producing the good and can produce it with the fewest resources.
   C. has the greatest opportunity cost of producing the good regardless of whether it is produced with the fewest resources.
   D. has the greatest opportunity cost of producing the good and produces it with the fewest resources.
   E. can produce it with the fewest resources.

7. Dumping is the practice of
   A. selling a lower quality product abroad.
   B. selling a commodity abroad at a price lower than the domestic price.
   C. selling a commodity abroad at a price higher than the domestic price.
   D. flooding a foreign market with large quantities of a good.
   E. none of the above.

8. The value of cross-price elasticity of demand between popcorn and peanuts is positive. This indicates all of the following except one. Which one?
   A. Popcorn and peanuts must be substitutes.
   B. An increase in the price of popcorn will shift the demand curve for peanuts to the right.
   C. An increase in the price of peanuts will shift the demand curve for popcorn to the right.
   D. A decrease in the supply of peanuts will shift the demand curve for popcorn to the right.
   E. Popcorn demand and peanut demand are price elastic.

9. A rise in price along the elastic segment of a given demand curve will
   A. decrease total utility, marginal utility, consumer surplus, and consumer expenditure.
   B. decrease total utility, consumer surplus, and consumer expenditure, and increase marginal utility.
   C. decrease total utility and consumer surplus, and increase consumer expenditure and marginal utility.
   D. increase consumer surplus through a decrease in consumer expenditure.
   E. decrease consumer surplus through an increase in consumer expenditure.

10. Of the following fiscal programs, which has the least effect, per dollar, on aggregate demand?
   A. defense spending.
   B. road construction.
   C. grants for scientific research and development.
   D. social welfare.
   E. government purchases of labor.

11. Which of the following is true of a perfectly competitive firm that operates in the short run at the profit-maximizing quantity but not true of a monopolist that does not practice price discrimination?
   A. Marginal revenue is less than marginal cost.
   B. Price is greater than marginal cost.
   C. Marginal revenue equals marginal cost.
   D. Price equals marginal cost.
   E. Marginal revenue is greater than average revenue.

12. Raising the discount rate is
   A. an expansionary policy, because it raises the ratio of excess to total reserves in the banking system.
   B. a contractionary policy on the part of member banks of the Federal Reserve System, because it raises firms' costs of borrowing from them.
   C. a contractionary policy on the part of the Fed, because it raises commercial banks' cost of borrowing from it.
   D. an expansionary policy on the part of member banks of the Federal Reserve System, because it raises their profits relative to those of nonmember banks.
   E. an expansionary policy on the part of the Fed, because increasing the interest rates banks are allowed to charge will increase their willingness to make loans.

13. If a firm is better off operating than shutting down, what is true at the quantity where marginal cost equals marginal revenue?
   A. Profit is maximized.
   B. Average cost equals average revenue.
   C. Total cost equals total revenue.
   D. Revenue is maximized.
   E. Cost is minimized.

14. The immediate and primary result of international trade is that
   A. consumer surplus increases in the importing country and producer surplus increases in the exporting countries.
   B. consumer surplus increases in the exporting country and decreases in the importing countries.
   C. consumer surplus increases in both the exporting and importing countries.
   D. producer surplus increases in both countries.
   E. consumer surplus decreases in both countries.

15. If two perfectly competitive firms have the same short-run supply curve, then they must have the same
 A. marginal cost and average total cost curves.
 B. marginal cost and average fixed cost curves.
 C. average total cost and average fixed cost curves.
 D. average fixed cost and average variable cost curves.
 E. marginal cost curves.

16. Which of the following is true of marginal revenue for a monopolist that does not price discriminate?
 A. P = MR because there are no close substitutes for the monopolist's product.
 B. P > MR because the monopolist must decrease price on all units sold in order to sell an additional unit.
 C. P < MR because the monopolist must decrease price on all units sold in order to sell an additional unit.
 D. AR = MR because there are no close substitutes for the monopolist's product.
 E. P = MR only at the profit-maximizing quantity.

17. What is the effect of imposing a $100 lump-sum tax on a monopolist that continues to operate after the tax?
 A. The firm experiences no change in the profit-maximizing price or quantity, or in its profit.
 B. The firm experiences no change in the profit-maximizing price and quantity, but its profit decreases.
 C. The firm experiences no change in the profit-maximizing price and quantity, but its profit increases.
 D. The firm's profit-maximizing quantity increases, but price does not change.
 E. The firm's profit-maximizing price decreases, but quantity does not change.

18. If the Fed had to choose between fixing the interest rate and fixing the supply of money,
 A. it would always fix the money supply, so that the price level would be stable.
 B. it would always fix the money supply, so that spending would be stable.
 C. it would always fix the interest rate, so that investment would be stable.
 D. it would always fix the interest rate, so that demand for money would be stable.
 E. neither alternative would be clearly better than the other.

19. Which of the following is most likely to be an increasing-cost industry?
 A. An industry whose firms experience diminishing marginal productivity.
 B. An industry whose firms experience economies of scale.
 C. An industry that is a major buyer in the markets for the inputs it uses.
 D. An industry that is a very small buyer in the markets for the inputs it uses.
 E. An industry that is a major seller in the markets for its outputs.

20. If the firms in a monopolistically competitive industry are incurring short-run losses, which of the following will occur in the long run?
 A. Some firms will leave the industry.
 B. Customers of firms that leave the industry will switch to remaining firms.
 C. Firms that remain in the industry will face increased demand.
 D. Firms will continue to incur losses.
 E. A, B, and C.

21. One of the following statements about the kinked demand curve theory is incorrect. Which one?
 A. The theory explains why a change in marginal cost may not lead to a change in price.
 B. The theory assumes that a firm's competitors follow a price increase but ignore a price decrease.

C. The theory is one of several theories of oligopoly behavior in economics.
D. The theory predicts that oligopoly prices will tend to be rigid.
E. The theory incorporates a marginal revenue curve with a gap at the firm's currently produced output level.

22. Which of the following, other things constant, will shift the demand curve for money to the right?
A. an increase in real GNP.
B. a decrease in the interest rate.
C. an increase in the interest rate.
D. a decrease in real GNP.
E. a decrease in the price level.

23. Suppose that General Motors decreases its prices and Ford and Chrysler follow this with their own price decreases. Which of the following is true?
A. This conduct is consistent with the kinked demand curve theory, but not the price leadership theory.
B. This conduct is not consistent with the kinked demand curve theory, but it is consistent with the price leadership theory.
C. The kinked demand curve theory cannot be applied to the auto industry, since it is not an oligopoly.
D. The kinked demand curve theory cannot be applied since it is a theory of monopolistic competition, and the auto industry is an oligopoly.
E. This conduct is consistent with both the kinked demand curve and the price leadership theories.

24. From a Keynesian viewpoint, under which of the following conditions would monetary policy be less effective?
A. both the demand curve for money and the demand curve for investment are flat.
B. both the demand curve for money and the demand curve for investment are steep.
C. the demand curve for money is flat and the demand curve for investment is steep.
D. the demand curve for investment is flat and the demand curve for money is steep.
E. both the quantity of money demanded and the quantity of investment demanded are very sensitive to changes in the interest rate.

25. In the case of a backward-bending labor supply curve,
A. the income effect always dominates the substitution effect.
B. the substitution effect always dominates the income effect.
C. the substitution effect is always equal to the income effect.
D. the substitution effect dominates the income effect along the positively sloped segment of the curve.
E. the substitution effect dominates the income effect along the negatively sloped segment of the curve.

26. When are the balance of payments accounts out of balance?
A. only when export are greater than imports.
B. only when imports are greater than exports.
C. when exports are either greater or less than imports.
D. only when exports are greater or less than imports over a sustained period.
E. none of the above.

27. Adam Smith's term, the "invisible hand," refers to
A. the hidden role of government that operates behind the scene.
B. the most capable companies in the economy.
C. market forces.
D. the role of change and random events in the economy.
E. role of underground economic activities.

28. Consumption, investment, and aggregate demand are related in that
- A. they are all the same thing.
- B. aggregate demand is equal to consumption minus investment.
- C. consumption and investment are parts of aggregate demand.
- D. consumption and investment determine aggregate supply; thus they work with aggregate demand to determine the equilibrium price level and quantity of output.
- E. equilibrium price and aggregate quantity are determined by shifts in the consumption function and the resulting shifts in the investment function.

29. If prices of goods are sticky, then firm owners will
- A. not decrease an excess supply by lowering prices but will cut back production and employment instead.
- B. lower wages to protect their profits.
- C. not mind paying higher wages or having to hire more workers.
- D. lower interest rates so that they don't have to pay so much for capital goods.
- E. not mind paying higher interest rates for capital goods.

30. Which of the following is consistent with the assumption that exports are autonomous?
- A. net imports are negative at all income levels.
- B. net exports are positive at all income levels.
- C. net exports are negative at low income levels and positive at high income levels.
- D. net exports are positive at low income levels and negative at high income levels.
- E. net exports are constant at all income levels.