1. According to classical economists,
   a. money was a "veil" that determined the nominal values in which such variables as the level of economic activity were measured.
   b. the changes of real money stocks may influence resource allocation of an economy.
   c. the changes of real money stocks had no effect on resource allocation of an economy.
   d. both (a) and (b).
   e. both (a) and (c).

2. If the consumption function is given by $C=100+0.5Y_D$, where $Y_D$ denotes the disposable income, then an increase in government spending of 1 unit that is financed by a tax increase by same amount will cause:
   a. output to rise by 0.5 units.
   b. output to rise by 2 units.
   c. output to rise by 1.5 units.
   d. output to rise by 1 unit.
   e. no change in output.

3. According to the life cycle hypothesis, a one-time or transient change in income
   a. has little impact on consumer behavior.
   b. has the same effect as a change in wealth of the same amount.
   c. will not affect future expected income.
   d. All of the above.
   e. None of the above.

4. Over the past year, output of the economy grew 3%, capital grew 4%, and labor grew 3%. If the elasticities of output with respect to capital and labor are 0.3 and 0.7 respectively, how much did productivity grow?
   a. -0.3%.
   b. -0.2%.
   c. 0.0%.
   d. 0.2%.
5. Which of the following variables is not exogenous to the issue under discussion?
   a. Money supply; when the issue of money being neutral or not is discussed.
   b. Income tax rates; when the magnitudes of the distortion are measured.
   c. Consumption tax rates; when the optimal tax rates are determined.
   e. Technology progress in the Neoclassical growth model.

6. The inventory approach to the transaction demand for money
   a. provides a theoretical basis for the positive relationship between money demand and the rate of interest.
   b. suggests that the demand for money and bonds will depend on the cost of making a transfer between money and bonds.
   c. suggests that the demand for money and bonds will depend on the brokerage fee.
   d. Either (a) or (b).
   e. Either (b) or (c).

7. If the central bank targets the interest rate, it
   a. provides an anti-inflation guarantee.
   b. does not provide an anti-inflation guarantee.
   c. must increase the money supply to accommodate any increase in money demand.
   d. Both (a) and (c).
   e. Both (b) and (c).

8. The aggregate demand cure may be derived from the IS-LM analysis by shifting
   a. the IS curve as the price changes.
   b. the real money supply and thus LM curve for each new price level.
   c. both the LM and IS curves since the real money supply and real expenditures change when P changes.
   d. the LM rightward when P increases to define Y.
   e. None of the above.
9. An increase in the price level will
   a. increase the real money supply and shift the aggregate demand curve.
   b. decrease the real money supply and shift the aggregate demand curve.
   c. change the slope of the aggregate demand curve at each income level.
   d. decrease the real money supply and decrease the level of aggregate demand.
   e. None of the above.

10. In the IS-LM model, which of the following statement is NOT true?
    a. the IS curve implies that the personal saving is always equal to investment.
    b. the IS curve under an open economy is steeper than that of an autarky economy.
    c. the IS curve either under an open economy or under an autarky economy is independent of the price level.
    d. the IS curve either under an open economy or under an autarky economy is rightward shifting when the expected marginal productivity of capital increases.
    e. All of the above.

11. Ricardian equivalence concludes that
    a. government purchases of goods and services are equivalent to private purchases of goods and services.
    b. government infrastructure is equivalent to private investment.
    c. government debt to pay for cuts in lump-sum taxes creates a strong intertemporal substitution effect.
    d. Government debt to pay for cuts in income taxes has no effect on private consumption.
    e. None of the above.

12. In the neoclassical (Solow-Swan) growth model with a constant rate of technological progress, which of the following statements is NOT true?
    a. In steady state, the level of output per effective worker is independent of the rate of technological progress.
    b. In steady state, the capital stock per effective worker is independent of the rate of technological progress.
c. In steady state, the growth rate of effective worker is growing at the rate equals to the sum of population growth rate and the rate of technological progress.

d. In steady state, capital is growing at the rate equals to the sum of population growth rate and the rate of technological progress.

e. In steady state, output per worker is independent of the rate of technological progress.

13. Which of the following statements related to the golden rule of capital is NOT true?

a. The golden rule of capital is defined as the level of capital at which the growth rate of per-capita consumption can be maximized.

b. The golden rule of capital is defined in the steady state.

c. If a country’s capital level is below the golden-rule level, an increase in saving rate will lead to an increase in consumption in the long run.

d. If a country’s capital level is below the golden-rule level, and increase in saving rate will lead to a decrease in consumption in the short run.

e. The golden-rule of capital is derived under the neoclassical growth model.

14. An expansionary monetary policy under floating exchange rate regime will

a. shift LM curve rightward in the short run.

b. shift LM curve leftward in the short run.

c. change the real exchange rate in the long run.

d. keep the price level unchanged in the long run.

e. All of the above are correct.

15. Which of the following will shift the short-run Phillips curve?

a. supply shocks in the final good and service market.

b. supply shocks in the money market.

c. an expansionary fiscal policy.

d. exogenously change of private consumption behavior.

e. None of the above.
第二部分：計算題(每題 10 分)

1. Suppose the expectations-augmented aggregate supply curve is given by \( y = 100(p - p^e) + 600 \), and the aggregate demand curve is given by \( y = 100 + 0.5G + 0.8(M/P) + e \), where \( p \) and \( p^e \) are actual and expected price level, \( G = 600 \) is the government expenditure, \( M = 400 \) is the money supply, and \( e \) is a random shock with two possible values, 100 and -100 each of which with the probability 0.5.

   (1) Derive the rational expectation of \( p \).

   (2) Suppose there is a positive random shock \( e = 100 \), and the government maintains its fiscal and monetary policies to keep \( G \) at 600 and \( M \) at 400. Find the equilibrium values of \( p \) and \( y \).

2. An economy described by the Solow-Swan growth model has the following production function: \( y = k^{0.5} \), where \( y \) and \( k \) stand for output and capital per effective worker respectively.

   (1) Solve for the steady-state value of \( y \) as a function of saving rate, population growth rate and rate of technology progress.

   (2) A developed country has a saving rate of 28 percent and a population growth rate of 1 percent per year. A less-developed country has a saving rate of 10 percent and a population growth rate of 4 percent per year. In both countries, the rates of technology progress are both 2 percent per year. Find the steady-state value of \( y \) for each country. What policies might these two countries pursue to raise its level of per-capita consumption?
個體經濟部份：

1. 假設某一商品的價格\(p\)，需求量\(q^d\)，供給量\(q^s\)的關係為：
\[ q^s = -15 + 5p, \quad q^d = 20 - 2p \]
請問

(A) 若將價格下限(price floor)設為 \(p = 6\) 時，市場交易量 \(q^*\) = ? (5%)

(B) 若將價格上限(price ceiling)設為 \(p = 6\) 時，市場交易量 \(q^*\) = ? (5%)

2. 請用需求彈性的大小說明，一個追求收入最大的廠商提高其商品售價的條件為何？此廠商停止調整商品售價的條件又為何？(10%)

3. Suppose that a monopolist faces a demand curve of \(D(p) = 10 - p\) and has a fixed supply of 4 units of output to sell. What is its profit-maximizing price and what are its maximal profits? (10%)

4. Consider a duopoly producing a homogenous product. Firm 1 produces one unit of output with two unit of labor and one unit of raw material. Firm 2 produces one unit of output with one units of labor and one unit of raw material. The unit costs of labor and raw material are \(w\) and \(r\). The (inverse) demand curve facing the this industry is \(p = 1 - q_1 - q_2\), where \(q_i (i=1,2)\) denotes the output level for firm \(i\).

(A) What is the competitive equilibrium level of industry output? (5%)

(B) If each firm behaves as a Cournot competitor, what is firm 1’s optimal choice given firm 2’s output. (5%)

(C) Compute the Cournot equilibrium amount of output for each firm. (5%)

(D) Explain the effect of the price of labor on firm 2’s profit. (5%)