Part I. 40 Multiple choice questions. **Answer ALL questions.** Choose the BEST answer. (50%)

1. A group of firms that produce the same or similar products is:
   A) a plant.
   B) an industry.
   C) a partnership.
   D) a multiplant firm.

2. The graph below depicts a monopolistically competitive firm.

   ![Graph of a monopolistically competitive firm](image)

   At the profit-maximizing level of short-run output, this monopolistically competitive firm will be making a profit of approximately:
   A) $275.
   B) $350.
   C) $500.
   D) $525.

3. Adding the market value of all final and intermediate goods and services in an economy in a given year would result in:
   A) the calculation of GDP for that year.
   B) the calculation of NDP for that year.
   C) an amount less than GDP for that year.
   D) an amount greater than GDP for that year.
4. A budget surplus would be associated with GDP level:
A) 0H.
B) 0J.
C) 0K.
D) 0L.

5. Answer the question based on the following consolidated balance sheet for the commercial banking system. Assume the required reserve ratio is 12 percent. All figures are in billions of dollars.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and net worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>$ 60</td>
</tr>
<tr>
<td>Loans</td>
<td>Demand deposits $ 150</td>
</tr>
<tr>
<td>Property</td>
<td>Stock Shares 135</td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

The commercial banking system has excess reserves of:
A) $32 billion.
B) $36 billion.
C) $42 billion.
D) $60 billion.

6. Lowering the discount rate has the effect of:
A) changing required into excess reserves.
B) changing excess into required reserves.
C) making it less expensive for commercial banks to borrow from the Central Bank.
D) forcing commercial banks to call in outstanding loans from their best customers.
7. In the kinked demand model of noncollusive oligopoly, if one firm increases its price, the most likely reaction of the other firms will be to:
   A) decrease their prices.
   B) increase their prices.
   C) not change their prices.
   D) fix prices.

8. An expected decline in the prices of consumer goods will:
   A) decrease aggregate demand.
   B) increase the quantity of real domestic output demanded.
   C) increase aggregate demand.
   D) decrease the quantity of real domestic output demanded.

9. Which of the following is not included in the \( M_1 \) measure of the money supply?
   A) coins held in a child’s piggy bank.
   B) currency in a grocery store cash register.
   C) currency held in bank vaults.
   D) traveler’s checks.

10. A decrease in the interest rate will cause a(n):
    A) increase in the transactions demand for money.
    B) decrease in the transactions demand for money.
    C) decrease in the amount of money held as an asset.
    D) increase in the amount of money held as an asset.

11. Which would contribute most to a firm experiencing "economies of scale"?
    A) rising long-run average costs
    B) the law of diminishing marginal returns
    C) specialization of production within a firm
    D) deterioration of information and control within a firm
12. If monopolistically competitive firms in an industry are making an economic profit, then:
   A) new firms will enter the industry and product demand will increase for the existing firms.
   B) firms will exit the industry and product demand will decrease for the firms that remain.
   C) firms will exit the industry and product demand will increase for the firms that remain.
   D) new firms will enter the industry and product demand will decrease for the existing firms.

13. The claims of nonowners of a bank against the bank's assets are called:
   A) loans.
   B) net worth.
   C) liabilities.
   D) required reserves.

14. Changes in interest rates cause a shift in:
   A) neither the investment demand curve nor the aggregate demand curve.
   B) the investment demand curve, but not the aggregate demand curve.
   C) the aggregate demand curve, but not the investment demand curve.
   D) the investment demand curve and the aggregate demand curve.

15. A trough in the business cycle occurs when:
   A) cyclical unemployment is at a minimum point.
   B) employment and output reach their lowest levels.
   C) the economy is at full employment.
   D) structural and frictional unemployment are at their highest levels.

16. Collusive control over price may permit oligopolists to:
   A) use new technology, achieve economies of scale, and get government subsidies.
   B) achieve economies of scale, reduce costs, and prevent price cheating.
   C) increase product demand, increase product supply, and lower cost.
   D) reduce uncertainty, increase profits, and possibly limit entry of new firms.
17. The functions of money are to serve as a:
   A) resource allocator, method for accounting, and means of income distribution.
   B) unit of account, store of value, and medium of exchange.
   C) determinant of consumption, investment, and government spending.
   D) factor of production, exchange, and aggregate supply.

18. If a person's nominal income increases by 5% while the price level increases by 2%,
    the person's real income:
    A) increases by 3%.
    B) increases by 5%.
    C) decreases by 7%.
    D) decreases by 2%.

19. Under oligopoly, if one firm in an industry significantly increases advertising
    expenditures in order to capture a greater market share, it is most likely that other
    firms in that industry will:
    A) pursue a strategy to reduce advertising expenditures to maintain profits.
    B) decide to increase advertising expenditures even if it means a reduction in profits.
    C) make no changes in advertising expenditures because advertising is effective in the
       short run, but not the long run.
    D) increase the price of the product to improve profits and then increase advertising
       expenditures.

20. If the demand for money and the supply of money both increase, then the new
    equilibrium:
    A) quantity of money and the interest rate will both increase.
    B) quantity of money and the interest rate will both decrease.
    C) quantity of money will increase, but the change in the interest rate cannot be
       predicted.
    D) interest rate will increase, but the change in the quantity of money cannot be
       predicted.

21. The combination of fiscal policies that would reinforce each other and be most
    expansionary would be a(n):
    A) increase in government spending and taxes.
    B) decrease in government spending and taxes.
    C) decrease in government spending and an increase in taxes.
    D) increase in government spending and a decrease in taxes.
22. Based on the following price and output data over a five-year period for an economy that produces only one good to answer the question.

<table>
<thead>
<tr>
<th>Year</th>
<th>Units of output</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>$2</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>6</td>
</tr>
</tbody>
</table>

If year 2 is the base year, real GDP for year 3 is:
A) $30.
B) $40.
C) $45.
D) $60.

23. Implicit costs are:
A) equal to total fixed costs.
B) comprised entirely of variable costs.
C) forgone payments for self-employed resources.
D) always greater in the short run than in the long run.

24. The following data about a hypothetical economy are in billions of dollars.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal consumption expenditures</td>
<td>$4,500</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$150</td>
</tr>
<tr>
<td>Gross private domestic investment</td>
<td>$800</td>
</tr>
<tr>
<td>Government purchases</td>
<td>$950</td>
</tr>
<tr>
<td>Exports</td>
<td>$65</td>
</tr>
<tr>
<td>Imports</td>
<td>$85</td>
</tr>
</tbody>
</table>

Personal consumption expenditures are approximately what percent of GDP in this economy?
A) 67 percent
B) 70 percent
C) 72 percent
D) 75 percent

25. Other things being equal, an expansion of commercial bank lending:
A) changes the composition, but not the size, of the money supply.
B) is desirable during a period of demand-pull inflation.
C) reduces the money supply.
D) increases the money supply.
26. Net exports must be a negative number when:
   A) a nation's imports of goods and services rise.
   B) a nation's exports of goods and services fall.
   C) a nation's exports of goods and services are greater than its imports.
   D) a nation's imports of goods and services are greater than its exports.

27. A monopolistically competitive industry is like a purely competitive industry in that:
   A) each industry produces a standardized product.
   B) nonprice competition is a feature in both industries.
   C) neither industry has significant barriers to entry.
   D) firms in both industries face a horizontal demand curve.

28. If the Central Bank buys government securities from commercial banks in the open market,:
   A) the Central Bank gives the securities to the commercial banks, and they pay for them by writing checks that increase their reserves at the Central Bank.
   B) the Central Bank gives the securities to the commercial banks, and they pay for them by writing checks that decrease their reserves at the Central Bank.
   C) commercial banks give the securities to the Central Bank, and it pays for them by increasing the reserves of commercial banks at the Central Bank.
   D) commercial banks give the securities to the Central Bank, and it pays for them by decreasing the reserves of commercial banks at the Central Bank.

29. The economy experiences a decrease in the price level and an increase in real domestic output. Which is a likely explanation?
   A) consumer incomes and the quantity of labor have decreased
   B) interest rates and wage rates have decreased
   C) the prices of imported resources have increased
   D) national income abroad has increased

30. A mismatch between the geographic location of workers and the location of job openings would result in what type of unemployment?
   A) wait
   B) cyclical
   C) frictional
   D) structural
31. A consumer holds money to meet spending needs. This would be an example of the:
   A) use of money as a measure of value.
   B) use of money as legal tender.
   C) transactions demand for money.
   D) asset demand for money.

32. Which of the following is not a common tactic in the price leadership model?
   A) Infrequent price changes.
   B) Communicating intended price changes to the industry.
   C) Avoidance of price wars.
   D) Signing legal agreements with other firms to fix prices.

33. Money spent on the purchase of a new house is included in the GDP as a part of:
   A) the consumption of private fixed capital.
   B) personal consumption expenditures.
   C) personal saving.
   D) gross private domestic investment.

34. Refer to the above graph, in which $D_t$ is the transactions demand for money, $D_m$ is the
   total demand for money, and $S_m$ is the supply of money. If the interest rate was 4
   percent, the asset demand for money would be:
   A) $125.
   B) $175.
   C) $200.
   D) $225.
35. An increase in productivity will shift the aggregate:
   A) demand curve leftward.
   B) supply curve rightward.
   C) demand curve rightward.
   D) supply curve leftward.

36. A bank is in the position to make loans when required reserves:
   A) equal actual reserves.
   B) are less than actual reserves.
   C) equal excess reserves.
   D) are greater than actual reserves.

37. Monopolistic competition is characterized by excess capacity because:
   A) firms are always profitable in the long run.
   B) firms charge a price that is less than marginal cost.
   C) firms produce at an output level less than the least-cost output.
   D) the demand for a product is perfectly elastic in this type of industry.

38. The crowding-out effect suggests that:
   A) increases in government spending may raise the interest rate and thereby reduce investment.
   B) increases in consumption are always at the expense of saving.
   C) increases in government spending will close a recessionary gap.
   D) high taxes reduce both consumption and saving.

39. If the Consumer Price Index was 170 in one year and 180 in the next year, then the rate of inflation from one year to the next was approximately:
   A) 5.5 percent.
   B) 5.9 percent.
   C) 6.3 percent.
   D) 7.2 percent.
40. The following table shows the aggregate demand-aggregate supply schedule for a hypothetical economy.

<table>
<thead>
<tr>
<th>Real domestic output demanded (in billions)</th>
<th>Real domestic output supplied (in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3000</td>
<td>$9000</td>
</tr>
<tr>
<td>4000</td>
<td>8000</td>
</tr>
<tr>
<td>5000</td>
<td>7000</td>
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<td>6000</td>
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<td>Price level</td>
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<td>150</td>
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<td>100</td>
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</tbody>
</table>

If the quantity of real domestic output demanded increased by $2000 at each price level, the new equilibrium price level and quantity of real domestic output would be:
A) 350 and $8000.
B) 300 and $8000.
C) 250 and $7000.
D) 200 and $6000.

Part II. Short Questions. Show all your work for full credits. Answer TWO of the followings. (50%)

1. (a) Assume that a firm in the monopolistic competitive market is at its long-run equilibrium. With no change in the product demand, how would the equilibrium price, equilibrium output level and profit (if any) be if at present a new technology allows the firm to produce the product at a lower cost? Explain with the help of a diagram. [Hint: How does the effect affect the cost structure of the firm?] (20%)

(b) Give three examples of monopolistic competitive market and two examples of oligopolist market. Country or city specific examples are acceptable. (5%)

2. The SARS incidence in Hong Kong in 2003 had brought about a fall in real output of the Hong Kong economy.

(a) What kind of GDP gap and which type of unemployment the Hong Kong economy had probably experienced in 2003? (4%)
(b) With the help of the Chinese central government, CEPA and the individual traveling scheme had been implemented since 2004. How would these measures help to solve the down turn of the Hong Kong economy due to the SARS incidence? Explain with an AD-AS diagram. [Hint: Do these measures taken affect the demand side or the supply side of the economy?] (15%)

(c) If the measures mentioned in part (b) had not be implemented, what could the Hong Kong government have done (on the demand side or/and the supply side of the economy) in dealing with the problem? Discuss. (6%)

3. Consider an economy which recorded a real GDP of $180,000 millions in Year 1. The required reserve ratio of the banking system is 20%.

(a) In Year 2, the economy's real GDP was valued at $194,000 millions. Calculate the real GDP growth rate between these two years. (3%)

(b) What would happen to the interest rate as a result of the GDP growth? Explain your answer with the help of a money market diagram. (10%)

(c) What would happen to the money supply if the Central Bank purchases $20,000 government securities from the public? (5%)

(d) What kind of monetary policy is the Central Bank pursuing as described in part (c)? In general, how does this policy affect the equilibrium real GDP and price level of the economy? Discuss. (7%)

+++++ Good Luck ++++