Part A: Multiple Choice Questions (2 points each, total 60 points)

Please mark your answers on both the exam paper and the optic sheet.

1) Most economists use the aggregate demand and aggregate supply model primarily to analyze
   a. short-run fluctuations in the economy.
   b. the effects of macroeconomic policy on the prices of individual goods.
   c. the long-run effects of international trade policies.
   d. productivity and economic growth.

2) Recession come at
   a. regular intervals. During recessions consumption spending falls relatively more than investment spending.
   b. regular intervals. During recessions investment spending falls relatively more than consumption spending.
   c. irregular intervals. During recessions consumption spending falls relatively more than investment spending.
   d. irregular intervals. During recessions investment spending falls relatively more than consumption spending.

3) The classical dichotomy refers to the separation of
   a. prices and nominal interest rates.
   b. taxes and government spending.
   c. decisions made by the public and decisions made by the government.
   d. real and nominal variables.

4) Most economists believe that in the long run, changes in the money supply
   a. affect nominal but not real variables. This view that money is ultimately neutral is consistent with classical theory.
   b. affect nominal but not real variables. This view that money is ultimately neutral is inconsistent with classical theory.
   c. affect real but not nominal variables. This view that money is ultimately neutral is consistent with classical theory.
   d. affect real but not nominal variables. This view that money is ultimately neutral is inconsistent with classical theory.

5) Which of the following would not be included in aggregate demand?
   a. an increase in firms’ inventories.
   b. purchases of goods by households.
   c. firm’s purchases of newly produced machinery.
   d. government’s tax collections.

6) The wealth effect, interest-rate effect, and exchange-rate effect are all explanations for
   a. the slope of short-run aggregate supply.
   b. the slope of long-run aggregate supply.
   c. the slope of the aggregate-demand curve.
   d. everything that makes the aggregate-demand curve shift.

7) If the price level falls, the real value of a dollar
a. rises, so people will want to buy more.  
b. rises, so people will want to buy less.

c. falls, so people will want to buy more.  
d. falls, so people will want to buy less.

8) In the context of aggregate demand and aggregate supply, the wealth effect refers to the idea that, when the price level decreases, the real wealth of households

a. increases and as a result consumption spending increases. This effect contributes to the downward slope of the aggregate-demand curve.

b. decreases and as a result consumption spending increases. This effect contributes to the upward slope of the aggregate-supply curve.

c. increases and as a result households increase their money holdings; in turn, interest rates increase and investment spending decreases. This effect contributes to the downward slope of the aggregate-demand curve.

d. decreases and as a result households increase their money holdings; in turn, interest rates increase and investment spending decreases. This effect contributes to the upward slope of the aggregate-supply curve.

9) As the price level rises, the exchange rate

a. falls, so exports rise and imports fall.  
b. falls, so exports fall and imports rise.

c. rises, so exports rise and imports fall.  
d. rises, so exports fall and imports rise.

10) According to the theory of liquidity preference,

a. if the interest rate is below the equilibrium level, then the quantity of money people want to hold is less than the quantity of money the Fed has created.

b. if the interest rate is above the equilibrium level, then the quantity of money people want to hold is greater than the quantity of money the Fed has created.

c. the demand for money is represented by a downward-sloping line on a supply-and-demand graph.

d. All of the above are correct.

11) When the Fed sells government bonds, the reserves of the banking system

a. increase, so the money supply increases.  
b. increase, so the money supply decreases.

c. decrease, so the money supply increases.  
d. decrease, so the money supply decreases.

12) According to liquidity preference theory, a decrease in money demand for some reason other than a change in the price level causes

a. the interest rate to fall, so aggregate demand shifts right.

b. the interest rate to fall, so aggregate demand shifts left.

c. the interest rate to rise, so aggregate demand shifts right.

d. the interest rate to rise, so aggregate demand shifts left.

13) If the central bank increases the money supply, then initially people want to

a. sell bonds so the interest rate rises.  
b. sell bonds so the interest rate falls.

c. buy bonds so the interest rate rises.  
d. buy bonds so the interest rate falls.

Figure 34-4. On the figure, MS represents money supply and MD represents money demand.
14) Refer to Figure 34-4. Which of the following events could explain a shift of the money-demand curve from \( MD_1 \) to \( MD_2 \)?

a. a decrease in the price level  
   b. a decrease in the cost of borrowing

c. an increase in the price level  
   d. an increase in the cost of borrowing

15) Suppose the money-demand curve is currently \( MD_1 \). If the current interest rate is \( r_2 \), then

a. the quantity of money that people want to hold is less than the quantity of money that the Federal Reserve has supplied.

b. people will respond by selling interest-bearing bonds or by withdrawing money from interest-bearing bank accounts.

c. bond issuers and banks will respond by lowering the interest rates they offer.

d. in response, the money-demand curve will shift rightward from its current position to establish equilibrium in the money market.

16) Money is the most liquid asset available because

a. it is a store of value.  
   b. it is a medium of exchange.

c. it is a unit of account.  
   d. it has intrinsic value.

17) The primary difference between commodity money and fiat money is that

a. commodity money is a medium of exchange but fiat money is not.

b. fiat money is a medium of exchange but commodity money is not.

b. commodity money has intrinsic value but fiat money does not.

c. fiat money has intrinsic value but commodity money does not.

18) An open-market purchase

a. increases the number of dollars and the number of bonds in the hands of the public.

b. increases the number of dollars in the hands of the public and decreases the number of bonds in the hands of the public.

c. decreases the number of dollars and the number of bonds in the hands of the public.

d. decreases the number of dollars in the hands of the public and increases the number of bonds in the hands of the public.

19) Suppose the banking system currently has $400 billion in reserves, the reserve requirement is 8 percent, and excess reserves amount to $5 billion. What is the level of deposits?

a. $5,000 billion  
   b. $4,937.5 billion  
   c. $5,062.5 billion  
   d. $4,995 billion

20) The manager of the bank where you work tells you that your bank has $10 million in excess reserves. She also tells you that the bank has $400 million in deposits and $375 million dollars in loans. Given this information you find that the reserve requirement must be

a. 10/400.  
   b. 25/400.  
   c. 35/400.  
   d. 15/400.
21) When the price level falls, the number of dollars needed to buy a representative basket of goods
a. increases, so the value of money rises.    b. increases, so the value of money falls.
c. decreases, so the value of money rises.    d. decreases, so the value of money falls.

22) The value of money rises as the price level
a. rises, because the number of dollars needed to buy a representative basket of goods rises.
b. rises, because the number of dollars needed to buy a representative basket of goods falls.
c. falls, because the number of dollars needed to buy a representative basket of goods rises.
d. falls, because the number of dollars needed to buy a representative basket of goods falls.

23) Money demand depends on
a. the price level and the interest rate.    b. the price level but not the interest rate.
c. the interest rate but not the price level. d. neither the price level nor the interest rate.

24) If the dollar buys less cotton in Egypt than in the United States, then traders could make a profit by
a. buying cotton in the United States and selling it in Egypt, which would tend to raise the price of cotton in the United States.
b. buying cotton in the United States and selling it in Egypt, which would tend to raise the price of cotton in Egypt.
c. buying cotton in Egypt and selling it in the United States, which would tend to raise the price of cotton in Egypt.
d. buying cotton in Egypt and selling it in the United States, which would tend to raise the price of cotton in the United States.

25) If purchasing-power parity holds, then the value of the
a. nominal exchange rate is equal to one. A dollar buys as many goods in the U.S. as it does overseas.
b. nominal exchange rate is equal to one. A dollar buys the quantity of foreign currency equal to the U.S. price level divided by the foreign country’s price level.
c. real exchange rate is equal to one. A dollar buys as many goods in the U.S. as it does overseas.
d. real exchange rate is equal to one. A dollar buys the quantity of foreign currency equal to the U.S. price level divided by the foreign country’s price level.

26) Refer to Figure 30-3. If the relevant money-supply curve is the one labeled MS2, then in the long-run:
   a. when the money market is in equilibrium, one dollar purchases about one-third of a basket of goods and services.
   b. when the money market is in equilibrium, one unit of goods and services sells for 33 cents.
   c. there is an excess demand for money if the value of money in terms of goods and services is 0.5.
   d. All of the above are correct.

27) Suppose the relevant money-supply curve is the one labeled MS1; also suppose the economy’s real GDP is 30,000 for the year. If the money market is in equilibrium, then the velocity of money is approximately
a. 3.0   b. 6.0   c. 9.0   d. 1.5
28) Suppose a Starbucks tall latte cost $4.00 in the United States and 3.20 euros in the Euro area. Also, suppose a McDonald’s Big Mac costs $4.40 in the United States and 5.50 euros in Euro area. If the nominal exchange rate is .80 euros per dollar, the prices of which goods have prices that are consistent with purchasing-power parity?

a. both the tall latte and the Big Mac  

b. the tall latte but not the Big Mac  

c. the Big Mac but not the tall latte  

d. neither the tall latte nor the Big Mac

29) Other things the same, which of the following would both make Americans more willing to buy Italian goods?

a. the nominal exchange rate falls, the price of goods in Italy falls  

b. the nominal exchange rate falls, the price of goods in Italy rises  

c. the nominal exchange rate rises, the price of goods in Italy falls  

d. the nominal exchange rate rises, the price of goods in Italy rises

30) When the Mexican peso gets "stronger" relative to the dollar, 

a. the U.S. trade deficit with Mexico rises.  

b. the U.S. trade deficit with Mexico falls.  

c. the U.S. trade deficit with Mexico is unchanged.  

d. None of the above necessarily happens.

**Part B: Essay Questions (50 points)**

**Question 1.** The economy is currently at point A. Given the current situation - Recession - the central bank will employ an open market operation in order to stimulate the economy.

a. Show on a diagram and explain what will happen in the money market as a result of the central bank’s intervention. (8 pts)

**Answer:** Central Bank will increase the money supply buy purchasing bonds in order to stimulate the economy. As a result, the equilibrium interest rate will fall. As the cost of borrowing money (r) will be lower, this will stimulate the investment and the whole economy.
b. (i) In line with your answer in part A, explain the effect of the monetary policy on the real economy. (ii) Show the changes on the diagram below. (iii) Show the new equilibrium on the diagram and call it point B. (iv) What are the changes in the output and general price level following the monetary intervention? (12 pts)

**Answer:** Following an expansionary monetary policy, both investment and consumption will increase. Therefore, the AD curve will shift to right as shown below. As the new equilibrium occurs at point B, not only the output but also the general price level in the economy increases.

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**Question 2.** You take $1000 you had kept under your mattress and deposit it in your bank account. If this $1000 stays in the banking system as reserves and if banks hold reserves equal to 20 percent of deposits, a) By how much does the total amount of deposits in the banking system increase? (5 pts)

**Answer:** If banks follow fractional-reserve banking system and hold reserves only at the requirement level (20%), then the total amount of deposits in the banking system increases by $5,000 as the money multiplier is $1/0.2 = 5$.

b) By how much does the money supply increase? (5 pts)

**Answer:** Given the money multiplier of 5, deposits will increase by $5,000. However the money supply will increase less than $5,000, as the currency in circulation will decrease by $1000. Therefore, the money supply will increase by $4,000.
**Question 3.** Suppose the economy is in long-run equilibrium at point A on the diagram below. Also suppose that the government is having a budget deficit at point A. (5x4 pts)

![Diagram](image)

a. Explain what the government should do in order to offset its budget deficit?

**Answer:** An economy runs a budget deficit when T-G<0 or T<G. In order to offset the deficit, the government can increase taxes.

b. Explain the impact of this policy on the economy referring to the curves on the diagram. Name on the diagram the new equilibrium point as B?

**Answer:** When taxes increase, disposable income will decrease that is the money that households have available to spend or save will decrease. As a result households’ consumption will decrease which leads to a decrease in AD, therefore AD curve will shift to the left. This is an adverse fluctuation that results in a decrease in the level of output and an increase in unemployment (the new equilibrium will occur at point B).

c. What is this policy called?

**Answer:** The policy is called contractionary fiscal policy.

d. If the government keeps it budget balanced, explain how the policymakers can reach to the potential level of output.

**Answer:** To offset the adverse fluctuation in AD, the central bank can apply expansionary monetary policy and increase money supply that results in an increase in AD, and shifts back AD curve to the initial one.