Part I (60%) Select the most appropriate answer and mark the corresponding entry on the scantron card. Good luck!

1) Given $Y$, the aggregate real money demand schedule $L(R,Y)$
   A) Slopes downward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy
   B) Slopes upward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy
   C) Has a zero slope because a fall in the interest rate keeps constant the desired real money holdings of each household and firm in the economy
   D) Slopes downward because a fall in the interest rate reduces the desired real money holdings of each household and firm in the economy
   E) None of the above.

2) An increase in
   A) real output raises the interest rate while a fall in real output lowers the interest rate, given the price level and the money supply.
   B) nominal output raises the interest rate while a fall in real output lowers the interest rate, given the price level and the money supply.
   C) real output decreases the interest rate while a fall in real output increases the interest rate, given the price level.
   D) real output raises the interest rate while a fall in real output lowers the interest rate, given the money supply.
   E) nominal output raises the interest rate while a fall in real output lowers the interest rate, given the price level.

3) Which one of the following statements is the most accurate?
   A) A reduction in the average value of transactions carried out by a household or a firm causes its demand for money to rise.
   B) A rise in the average value of transactions carried out by a household or a firm causes its demand for money to rise.
   C) A rise in the average value of transactions carried out by a household or a firm causes its demand for real money to rise.
   D) A rise in the average value of transactions carried out by a household or a firm causes its demand for nominal money to rise.
   E) A rise in the average value of transactions carried out by a household or a firm causes its demand for money to fall.
4) The action of arbitrage is
   A) The process of selling currency at different prices in different markets
   B) The process of buying and selling currency at the same price
   C) The process of buying a currency cheap and selling it high
   D) The process of buying a currency high and selling it cheap
   E) None of the above.

5) Which one of the following statements is the most accurate?
   A) A permanent increase in a country’s money supply causes a proportional short-run depreciation of its currency against foreign currencies.
   B) A permanent increase in a country’s money supply causes a proportional short-run appreciation of its currency against foreign currencies.
   C) A temporary increase in a country’s money supply causes a proportional long-run depreciation of its currency against foreign currencies.
   D) A permanent increase in a country’s money supply causes a proportional long-run depreciation of its currency against foreign currencies.
   E) A permanent increase in a country’s money supply causes a proportional long-run appreciation of its currency against foreign currencies.

6) Which one of the following statements is the most accurate?
   A) A decrease in the money supply lowers the interest rate while an increase in the money supply raises the interest rate, given the price level and output.
   B) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the price level.
   C) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the price level and output.
   D) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the output level.
   E) None of the above.

7) Which of the following statements is the most accurate?
   A) A rise in the interest rate offered by dollar deposits does not affect the U.S. dollar.
   B) A rise in the interest rate offered by dollar deposits causes the dollar to appreciate.
   C) For a given euro interest rate and constant expected exchange rate, a rise in the interest rate offered by dollar deposits causes the dollar to appreciate.
   D) A rise in the interest rate offered by dollar deposits causes the dollar to depreciate.
   E) None of the above.

8) An economy’s long-run equilibrium is the outcome that would be obtained if
   A) prices were perfectly flexible.
   B) prices were perfectly flexible and always adjusted immediately.
   C) prices were perfectly flexible and always adjusted immediately to preserve full employment.
   D) prices were perfectly fixed to preserve full employment.
   E) prices were perfectly fixed at the full employment point.
9) If the dollar interest rate is 10 percent, the euro interest rate is 6 percent, and the expected dollar depreciation against the euro is eight percent, then
   A) An investor should invest only in euros.
   B) An investor should invest only in dollars.
   C) An investor should be indifferent between dollars and euros.
   D) It is impossible to tell given the information.
   E) All of the above.

10) A rise in
   A) real GNP raises aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the left.
   B) real GNP raises aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.
   C) real GNP decreases aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.
   D) real GNP raises aggregate nominal money demand for a given interest rate, moving the L(R,Y) schedule to the right.
   E) nominal GNP raises aggregate real money demand for a given interest rate, moving the L(R,Y) schedule to the right.

11) Given the price level (P) and income (Y) in the U.S.,
   A) An increase in the European money supply causes the euro to appreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
   B) An increase in the European money supply causes the euro to depreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
   C) An increase in the European money supply causes the euro to depreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
   D) An increase in the European money supply causes the euro to appreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
   E) None of the above statements is true.

12) For all the main industrial countries in recent years,
   A) It is hard to tell whether month-to-month variability of the exchange rate is similar to changes in price levels.
   B) There is much less month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the short run.
   C) There is much more month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the short run.
   D) There is almost the same month-to-month variability of the exchange rate and price levels.
   E) There is much more month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the long run.

13) An appreciation of a country’s currency,
   A) Lowers the relative price of its exports and raises the relative price of its imports
   B) Raises the relative price of its exports and raises the relative price of its imports
   C) Decreases the relative price of its exports and lowers the relative price of its imports
   D) Raises the relative price of its exports and lowers the relative price of its imports.
   E) None of the above.
14) Which one of the following statements is the most accurate?
   A) The dollar rate of return on euro deposits is approximately the euro interest rate plus the rate of depreciation of the dollar against the euro.
   B) The dollar rate of return on euro deposits is the euro interest rate minus the rate of depreciation of the dollar against the euro.
   C) The dollar rate of return on euro deposits is approximately the euro interest rate minus the rate of depreciation of the dollar against the euro.
   D) The dollar rate of return on euro deposits is the euro interest rate plus the rate of depreciation of the dollar against the euro.
   E) The dollar rate of return on euro deposits is approximately the euro interest rate plus the rate of appreciation of the dollar against the euro.

Questions 15 – 20 refer to the following situation:
Consider a two period endowment economy. The preferences of households are described by the utility function

\[ U(C_1, C_2) = \log C_1 + \log C_2 \]

where \( C_t \) denotes consumption in period \( t = 1,2 \) and \( \log \) is the natural logarithm of \( x \). Households are endowed with 10 units of goods in period 1 and 12 units in period 2. Also, households must pay lump sum taxes \( T_1 \) and \( T_2 \) in periods 1 and 2 respectively. Finally, households have zero initial financial assets and can borrow and lend between periods in the world market, at an interest rate of ten percent (i.e. \( r^* = 0.1 \)).
There is a government that has zero initial financial wealth and has expenditures \( G_t = 1 \) in period \( t = 1,2 \). It finances those expenditures by collecting the taxes \( T_1 \) and \( T_2 \) and by borrowing or lending in the world market at the interest rate \( r^* = 0.1 \).

15. Assume that the government runs a balanced budget, that is, \( G_t = T_t, t = 1,2 \). The representative household’s consumption in periods 1 and 2 are, respectively,
   A) 10, 12
   B) 11, 11
   C) 12, 9
   D) 10.5, 10.5
   E) 9.5, 10.45
(Hint: Write the household’s budget constraint in present value form. Also, what is the condition for optimal consumption? Finally, recall that the derivative of \( \log x \) is \( 1/x \).)

16. Under the assumption in the previous question, the trade balance in period 1 is:
   A) Zero
   B) A surplus of 1.5
   C) A surplus of 2.45
   D) A deficit of 0.5
   E) A deficit of 2.5

17. Now assume that taxes in the first period are zero (i.e. \( T_1 = 0 \)). To finance \( G_2 \), the government borrows in the world market. Hence taxes in the second period are equal to \( G_2 \) plus the amount needed to repay the government debt. How much are taxes in the second period?
   A) 1
   B) 2
   C) 1.1
   D) 2.1
18. Under the assumptions of the previous question, the trade balance and the government surplus in the first period are respectively equal to:

A) -0.5, -1
B) 0, 0
C) 1, -1
D) -1.5, 1
E) 2, -1

(Hint: Recall our discussion in class. Alternatively, you may solve the household’s decision problem under the new assumption on taxes. Then find private and public savings.)

19) How do private savings differ under the assumptions of question 15 (balanced budget) in contrast to the assumptions of question 17 (zero taxes in the first period)?

A) There is no difference
B) Private savings are larger if the budget is balanced
C) Private savings are larger if taxes are zero in the first period
D) There is not enough information to tell
E) None of the above

20) The previous five questions illustrate that:

A) Given government expenditures, the timing of taxes and budget deficits do not matter (Ricardian Equivalence)
B) Capital mobility may hurt a country that is running fiscal deficits
C) Cutting taxes may stimulate aggregate demand and hence lead to a trade deficit
D) Cutting taxes helps the economy, hence leading to a trade surplus
E) All of the above

Part II. (40%)

In a recent testimony before the U.S. Congress, C. Fred Bergsten, head of the Peterson Institute for International Economics, argued:

The huge and growing international trade and current account imbalances, centered on the US external deficits and net debtor position, represent the single greatest threat to the continued prosperity and stability of the United States and world economies. ...The only effective US policy response to the problem, as its critical contribution to the needed global solution, is a conversion of our present (and especially prospective) budget deficits into modest surpluses à la 1998–2001.

Please discuss Bergsten’s position using the tools you have learned in class. Is it true that a current account imbalance is necessarily a threat to prosperity and stability? Why or why not? Would the elimination of budget deficits result in a reduction of our trade imbalances? If so, how? If not, what other fiscal policies would reduce our trade deficit? In either case, what would be the implications for world equilibrium, especially savings, investment, and interest rates? Be as thorough as you can. To get maximum credit, you should illustrate your arguments with savings-investment graphs and/or other tools you have studied in this course.

Please write your essay in the blue book provided.