MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which one of the following statements is most accurate?  
   A) In general, consumption demand rises by more than disposable income.
   B) In general, consumption demand rises by the same amount as disposable income rises.
   C) **In general, consumption demand rises by less than disposable income.**
   D) In general, consumption demand rises by more than income.

2) In the short-run, any rise in the real exchange rate, EP*/P, will cause  
   A) an upward shift in the aggregate demand function and a reduction in output
   B) **an upward shift in the aggregate demand function and an expansion of output**
   C) an upward shift in the aggregate demand function but leaves output intact
   D) an downward shift in the aggregate demand function and a reduction in output

3) Temporary tax cuts would cause:  
   A) the AA–curve to shift left.  
   B) the DD–curve to shift left.
   C) the AA–curve to shift right.  
   D) **the DD–curve to shift right.**

4) Which of the following is the most accurate?  
   A) **Any disturbance that raises aggregate demand for domestic output shifts the DD schedule to the right.**
   B) Any disturbance that lower aggregate demand for domestic output shifts the DD schedule to the right.
   C) Any disturbance that raises aggregate demand for domestic output shifts the DD schedule to the left.
   D) Any disturbance that lowers aggregate demand for foreign output shifts the DD schedule to the left.

5) Which one of the following statements is most accurate?  
   A) In the long run and in the short run, domestic output depends only on the available domestic supplies of factors of production.
   B) In the short run, domestic output depends only on the available domestic supplies of factors of production.
   C) **In the long run, domestic output depends only on the available domestic supplies of factors of production.**
   D) In the long run, foreign output depends only on the available domestic supplies of factors of production.

6) In the short-run, a temporary increase in the money supply  
   A) shifts the AA curve to the left, increases output and appreciates the currency.
   B) **shifts the AA curve to the right, increases output and depreciates the currency.**
   C) shifts the AA curve to the left, increases output and depreciates the currency.
   D) shifts the AA curve to the left, decreases output and depreciates the currency.
7) Which of the following have to be in equilibrium for the economy to be in equilibrium?
   A) the goods and output markets  B) the goods market only
   C) the money market only  D) the output and assets markets

8) In the short-run, an increase in government purchases causes
   A) a shift of the DD curve to the left, output decreases
   B) a shift of the DD curve to the left, output increases
   C) a shift of the DD curve to the right, output increases
   D) a shift of the DD curve to the right, output decreases

9) In the long-run equilibrium, after a permanent money-supply increase there follows:
   A) an increase in output, Y.  B) a decrease in output, Y.
   C) a decrease in exchange rate, E.  D) an increase in exchange rate, E.

10) The J-curve illustrates which of the following?
    A) the short-term effects of depreciation on the current account
    B) the immediate increase in current account caused by a currency depreciation
    C) the effects of depreciation on the home country’s economy
    D) the Keynesian view of international trade dynamics

11) The percent by which import prices rise when the home currency depreciates by 1% is the degree of
    A) pass-through from exchange rates to import prices.
    B) roll-forward from exchange rates to import prices.
    C) pass-on from exchange rates to import prices.
    D) pass-forward from exchange rates to import prices.
12. Which of the following statements is most accurate?

a. A temporary fall in a country’s income leads to current account deficits, while a permanent shock does not.

b. A permanent fall in a country’s income leads to current account deficits, while a temporary shock does not.

c. Both permanent and temporary income declines lead to current account deficits.

d. Both permanent and temporary income declines lead to current account surpluses.

13. If a country can borrow and lend freely, we expect

a. Its consumption to be as volatile as the output

b. Its consumption to be more volatile than the output

c. **Its consumption to be less volatile than the output.**

d. Its consumption is more volatile than the investment

14. The “Home bias” puzzle implies that Americans

a. hold a much larger share of foreign assets than is best for them

b. only hold foreign stocks and do not undertake direct investments

c. only invest in emerging market bond funds

d. **hold a much smaller share of foreign assets than an efficient portfolio would require**

15. Suppose that a country starts with output $Q$. A new project appears requiring $dK$ units of capital in year 0, generating an extra $dQ$ units of output in year 1 and all later years (but not in year 0). If the interest rate is $r$, investment in the project is justified if MPK is

a. **Greater than r**

b. Less than r

c. Equal to r

d. Equal to $1/r$.

16. A country's external wealth in 2005 is $200 billion. In 2006, the country runs a trade balance of $40 billion. Assume that the country has zero unilateral transfers (NUT=0), zero capital flows (KA=0) and no capital gains on external wealth. If the interest rate earned on the wealth in 2005 is 10%, the country's wealth in 2006 will be

a. $240 billion

b. $280 billion

c. $220 billion

d. **$260 billion**
17. The discovery of oil in the North Sea in the 1960s unleashed an investment boom in Norway. Assuming saving did not change, the increase in $I$ would have been accompanied by

a. An increase in current account deficits
b. A decrease in current account deficits
c. A decrease in capital inflows
d. An increase in the trade balance.

18. Which of the following is most accurate?

a. In a closed economy savings has to equal investment, in open economies the relationship need not hold
b. In a closed economy current income has to equal current expenditure, in the open economy it is the present value of expenditure that must equal present value of income
c. An open economy can keep consuming more than it earns by borrowing from abroad, but a closed economy cannot.
d. Both (a) and (b) above.

19. Suppose an open economy that is running at a long run full potential output equilibrium is hit with a negative money temporary demand shock. That is, the demand for real money balances temporarily fall for any given interest rate. What is the economy’s new equilibrium? What policy will you use to return to original long run equilibrium? (6 Points)

**Answer:** Decrease the money supply. This is just the opposite of increase in money supply analyzed in the textbook and the lecture slides discussed in class.

20. Suppose the republicans succeed in bringing a permanent fiscal contraction for the US economy. What happens to the equilibrium output and exchange rates? Use an AA-DD framework to explain the result. In the new equilibrium who ends up picking the fall in fiscal demand? (6 points)

**Answer:** This is just the opposite of a permanent increase in government expenditure analyzed in the textbook and the lecture slides discussed in class (see figure 16-16 of the textbook). Here DD will shift to the left, and because of expected exchange rate *depreciation*, AA will shift to the right. The result is a higher exchange rate at the same output. The logic is similar as given on page 445.
21. An open economy’s output is expected to be 100 units forever and it can borrow and lend freely from the rest of the world at an interest rate 10%. There is an unanticipated increase in output in the first period. That is, the economy’s output is 121, 100, 100, 100, 100….. on t=0,12,3,4…..Assume initial wealth is zero and there are no unilateral transfers. Assuming that the economy always chooses a smooth consumption such that its present value equals that of the output, what will be the first period consumption? What will be the trade balance? What will be the wealth level at the end of period 0? (8 points)

**Answer:** before the increase the present value of output is $100 + 100/0.1 = 1100$. The present value of consumption is $(1+1/0.1)C = 11C$, and therefore consumption is also 100. Now after the first period increase in output the present value is $121 + 100/0.1 = 1121$. The consumption now will be $1121/11 = 101.9$. First period Trade balance will be $121 – 101.9 = 19.1$, and the asset level at the end of $t = 0$ will be $0+ 19.1 = 19.1$.

22. An open economy’s output is expected to be 100 units forever and it can borrow and lend freely from the rest of the world at an interest rate 10%. Assume that the initial wealth is zero and there are no unilateral transfers. An investment opportunity for this economy arises whereby an investment of 45 units in period 1 will increase its output by 10 units forever from $t = 1$ onwards. However, in $t = 0$ the output will remain at 100. Shall the economy borrow and undertake this investment? If the economy always chooses a smooth consumption, what will be the consumption level that it will choose? What will be the trade balance in period 0? What will be the wealth level at the end of period 0? (8 points)

**Answer:** The present value of increase in output is $10/0.1 = 100$ and the investment is only 45. There is net positive worth of 55 in this investment. Undertake it. Consumption is calculated using

$$(1 + 1/0.1)C = PV(Q) – I = 100 + 110/0.1 – 45 = 1155.$$  
Thus $11C = 1155$, $C = 105$.

TB0 $= 100 – 105 – 45 = - 50$.

W0 $= 0 – 50 = -50$.

23. (Bonus question) What is the Paul Krugman’s NY times, posted on the class website, about? Mention any one of his key arguments. (5 points)

Read the Krugman article.