Midterm Examination of Economics

Winter term 2014

1. The value of the housing services provided by the economy's owner-occupied houses is
   a. included in GDP, and the estimated rental values of the houses are used to place a
      value on these housing services.
   b. included in GDP, and the actual mortgage payments made on the houses are used
      to estimate the value of these rental services.
   c. excluded from GDP since these services are not sold in any market.
   d. excluded from GDP since the value of these housing services cannot be estimated
      with any degree of precision.

2. In 2009, Corny Company grows and sells $2 million worth of corn to Tasty Cereal Company,
   which makes corn flakes. Tasty Cereal Company produces $6 million worth of corn
   flakes in 2009, with sales to households during the year of $4.5 million. The unsold
   $1.5 million worth of corn flakes remains in Tasty Cereal Company's inventory at the
   end of 2009. The transactions just described contribute how much to GDP for 2009?
   a. $4.5 million
   b. $6 million
   c. $6.5 million
   d. $8 million

3. An American company operates a fast food restaurant in Paris, France. Which of the
   following statements is accurate?
   a. The value of the goods and services produced by the restaurant is included in both
      French GDP and U.S. GDP.
   b. The value added by American workers and equipment in France is included in U.S.
      GDP and the value added by French workers and equipment is added to French
      GDP.
   c. The value of the goods and services produced by the restaurant is included in
      French GDP, but not in U.S. GDP.
   d. The value of the goods and services produced by the restaurant is included in U.S.
      GDP, but not in French GDP.

4. Foreign citizens earn more income in Ireland than Irish citizens earn in foreign countries.
   a. Ireland's net factor payments from abroad are positive, and its GDP is larger than its
      GNP.
   b. Ireland's net factor payments from abroad are positive, and its GNP is larger than its
      GDP.
c. Ireland’s net factor payments from abroad are negative, and its GDP is larger than its GNP.
d. Ireland’s net factor payments from abroad are negative, and its GNP is larger than its GDP.

5. Disposable income is
   a. the total income earned by a nation’s permanent residents.
   b. the total income earned by a nation’s residents in the production of good and services.
   c. the income that households and non-corporate businesses receive.
   d. the income that households and businesses have remaining after satisfying their obligations to the government.

Table 1
The table below contains data for Bahkan for the year 2010.

<table>
<thead>
<tr>
<th>GDP</th>
<th>$110</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income earned by citizens abroad</td>
<td>$5</td>
</tr>
<tr>
<td>Income foreigners earn here</td>
<td>$15</td>
</tr>
<tr>
<td>Losses from depreciation</td>
<td>$4</td>
</tr>
<tr>
<td>Indirect business taxes</td>
<td>$6</td>
</tr>
<tr>
<td>Statistical discrepancy</td>
<td>$0</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>$5</td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>$6</td>
</tr>
<tr>
<td>Social insurance contributions</td>
<td>$10</td>
</tr>
<tr>
<td>Interest paid to households by government</td>
<td>$5</td>
</tr>
<tr>
<td>Transfer payments to households from government</td>
<td>$15</td>
</tr>
<tr>
<td>Personal taxes</td>
<td>$30</td>
</tr>
<tr>
<td>Nontax payments to government</td>
<td>$5</td>
</tr>
</tbody>
</table>

6. Refer to Table 1. Gross national product for Bahkan in 2010 is
   a. $95.
   b. $100.
   c. $110.
   d. $115.

7. Refer to Table 1. Personal income for Bahkan in 2010 is
   a. $87.
   b. $89.
   c. $103.
   d. $105.
Table 2
The table below contains data for the country of Crete for the year 2010.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total income</td>
<td>$5731</td>
</tr>
<tr>
<td>Household purchases of durable goods</td>
<td>$1108</td>
</tr>
<tr>
<td>Household purchases of nondurable goods</td>
<td>$702</td>
</tr>
<tr>
<td>Household purchases of non-education services</td>
<td>$203</td>
</tr>
<tr>
<td>Household purchases of education services</td>
<td>$302</td>
</tr>
<tr>
<td>Household purchases of new housing</td>
<td>$816</td>
</tr>
<tr>
<td>Purchases of capital equipment</td>
<td>$333</td>
</tr>
<tr>
<td>Inventory changes</td>
<td>$75</td>
</tr>
<tr>
<td>Purchases of new structures</td>
<td>$267</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$401</td>
</tr>
<tr>
<td>Local government spending on goods and services</td>
<td>$236</td>
</tr>
<tr>
<td>State government spending on goods and services</td>
<td>$419</td>
</tr>
<tr>
<td>Federal government spending on goods and services</td>
<td>$1182</td>
</tr>
<tr>
<td>Transfer payments</td>
<td>$707</td>
</tr>
<tr>
<td>Foreign purchases of domestically produced goods</td>
<td>$217</td>
</tr>
<tr>
<td>Domestic purchases of foreign goods</td>
<td>$129</td>
</tr>
</tbody>
</table>

8. Refer to Table 2. What was Crete’s investment in 2010?
   a. $675
   b. $1090
   c. $1491
   d. $1793

9. Refer to Table 2. What were Crete’s government purchases in 2010?
   a. $1130
   b. $1601
   c. $1837
   d. $2544

10. A country reported nominal GDP of $200 billion in 2010 and $180 billion in 2009. It also reported a GDP deflator of 125 in 2010 and 105 in 2009. Between 2009 and 2010,
    a. real output and the price level both rose.
    b. real output rose and the price level fell.
    c. real output fell and the price level rose.
    d. real output and the price level both fell.
11. Suppose a basket of goods and services has been selected to calculate the CPI and 2002 has been selected as the base year. In 2002, the basket’s cost was $50; in 2004, the basket’s cost was $52; and in 2006, the basket’s cost was $54.60. The value of the CPI in 2004 was
   a. 96.2.
   b. 102.0.
   c. 104.0.
   d. 152.0.

12. In an imaginary economy, consumers buy only hot dogs and hamburgers. The fixed basket consists of 10 hot dogs and 6 hamburgers. A hot dog cost $3 in 2006 and $5.40 in 2007. A hamburger cost $5 in 2006 and $6 in 2007. Which of the following statements is correct?
   a. When 2006 is chosen as the base year, the consumer price index is 90 in 2007.
   b. When 2006 is chosen as the base year, the inflation rate is 150 percent in 2007.
   c. When 2007 is chosen as the base year, the consumer price index is 100 in 2006.
   d. When 2007 is chosen as the base year, the inflation rate is 50 percent in 2007.

13. The substitution bias in the consumer price index refers to the
   a. substitution by consumers toward new goods and away from old goods.
   b. substitution by consumers toward a smaller number of high-quality goods and away from a larger number of low-quality goods.
   c. substitution by consumers toward goods that have become relatively less expensive and away from goods that have become relatively more expensive.
   d. substitution of new prices for old prices in the CPI basket of goods and services from one year to the next.

14. The CPI was 120 in 2008 and 126 in 2009. Phil borrowed money in 2008 and repaid the loan in 2009. If the nominal interest rate on the loan was 8 percent, then the real interest rate was
   a. -2 percent.
   b. 3 percent.
   c. 5 percent.
   d. 13 percent.
15. Over the last ten years productivity grew faster in Oceania than in Freedonia and the population and total hours worked remained the same in both countries. It follows that
   a. real GDP per person must be higher in Oceania than in Freedonia.
   b. real GDP per person grew faster in Oceania than in Freedonia.
   c. the standard of living must be higher in Oceania than in Freedonia.
   d. All of the above are correct.

16. If your firm's production function has constant returns to scale, then if you double all your inputs, your firm's output will
   a. double and productivity will rise.
   b. double but productivity will not change.
   c. more than double and productivity will rise.
   d. more than double but productivity will not change.

17. If there are diminishing returns to capital, then
   a. capital produces fewer goods as it ages.
   b. old ideas are not as useful as new ones.
   c. increases in the capital stock eventually decrease output.
   d. increases in the capital stock increase output by ever smaller amounts.

18. Other things equal, relatively poor countries tend to grow
   a. slower than relatively rich countries; this is called the poverty trap.
   b. slower than relatively rich countries; this is called the fall-behind effect.
   c. faster than relatively rich countries; this is called the catch-up effect.
   d. faster than relatively rich countries; this is called the constant-returns-to-scale effect.

19. Most entrepreneurs do not have enough money of their own to start their businesses. When they acquire the necessary funds from someone else,
   a. their consumption expenditures are being financed by someone else's saving.
   b. their consumption expenditures are being financed by someone else's investment.
   c. their investments are being financed by someone else's saving.
   d. their saving is being financed by someone else's investment.

20. We would expect the interest rate on Bond A to be higher than the interest rate on Bond B if the two bonds have identical characteristics except that
   a. Bond A was issued by a financially weak corporation and Bond B was issued by a
financially strong corporation.

b. Bond A was issued by the Exxon Mobil Corporation and Bond B was issued by the state of New York.
c. Bond A has a term of 20 years and Bond B has a term of 1 year.
d. All of the above are correct.

21. When the government goes from running a balanced budget to running a budget surplus,
a. national saving decreases, the interest rate rises, and the economy’s long-run growth rate is likely to decrease.
b. national saving increases, the interest rate falls, and the economy’s long-run growth rate is likely to decrease.
c. national saving decreases, the interest rate rises, and the economy’s long-run growth rate is likely to increase.
d. national saving increases, the interest rate falls, and the economy’s long-run growth rate is likely to increase.

22. For an imaginary economy, when the real interest rate is 7 percent, the quantity of loanable funds demanded is $500 and the quantity of loanable funds supplied is $500. Currently, the nominal interest rate is 9 percent and the inflation rate is 4 percent. Currently,
a. the market for loanable funds is in equilibrium.
b. the quantity of loanable funds supplied exceeds the quantity of loanable funds demanded, and as a result the real interest rate will rise.
c. the quantity of loanable funds supplied exceeds the quantity of loanable funds demanded, and as a result the real interest rate will fall.
d. the quantity of loanable funds demanded exceeds the quantity of loanable funds supplied, and as a result the real interest rate will rise.

**Figure 1.** On the horizontal axis of the graph, $L$ represents the quantity of loanable funds in billions of dollars.
23. **Refer to Figure 1.** Which of the following events could explain a shift of the demand-for-loanable-funds curve from $D_1$ to $D_2$?
   a. The tax code is reformed to encourage greater saving.
   b. The tax code is reformed to encourage greater investment.
   c. The government starts running a budget deficit.
   d. The government starts running a budget surplus.

24. **Refer to Figure 1.** The position and/or slope of the Supply curve are influenced by
   a. the level of public saving.
   b. the level of national saving.
   c. decisions made by people who have extra income they want to save and lend out.
   d. All of the above are correct.

25. Which of the following events could explain an increase in interest rates together with an increase in investment?
   a. The government runs a larger deficit.
   b. The government institutes an investment tax credit.
   c. The government replaces the income tax with a consumption tax.
   d. None of the above is correct.

26. Other things the same, if the government increases transfer payments to households, then the effect of this on the government’s budget
   a. will make investment rise.
   b. will make the rate of interest rise.
   c. will make public saving rise.
   d. All of the above are correct.

**Scenario 1.** Assume the following information for an imaginary, closed economy.
   GDP = $200,000; consumption = $120,000; government purchases = $35,000; and taxes = $25,000.

27. **Refer to Scenario 1.** For this economy, public saving is equal to
   a. $-10,000 and the government is running a budget deficit of $10,000.
   b. $-10,000 and the government is running a budget surplus of $10,000.
   c. $10,000 and the government is running a budget deficit of $10,000.
   d. $10,000 and the government is running a budget surplus of $10,000.
Sample Population

<table>
<thead>
<tr>
<th>Person</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>Unpaid stay at home dad. Has not looked for a job in several years.</td>
</tr>
<tr>
<td>Ben</td>
<td>College president.</td>
</tr>
<tr>
<td>Allison</td>
<td>Part-time welder. Actively looking for full time work.</td>
</tr>
<tr>
<td>Brittany</td>
<td>Self-employed full-time wedding singer.</td>
</tr>
<tr>
<td>Cathy</td>
<td>Full-time physician’s assistant.</td>
</tr>
<tr>
<td>Calvin</td>
<td>Retired finance professor. Last applied for work 10 weeks ago.</td>
</tr>
<tr>
<td>Diane</td>
<td>Laid-off fork-lift operator expecting to be recalled.</td>
</tr>
<tr>
<td>David</td>
<td>Works for a bicycle store. Age 70.</td>
</tr>
<tr>
<td>Evelyn</td>
<td>Manager of health food store.</td>
</tr>
<tr>
<td>Eli</td>
<td>Museum guard. Was not at work last week due to illness.</td>
</tr>
<tr>
<td>Flora</td>
<td>Has never been employed. Looked for a job last week.</td>
</tr>
<tr>
<td>Frank</td>
<td>Fired from job as an investment banker. Last looked for work three weeks ago.</td>
</tr>
</tbody>
</table>

28. Refer to Sample Population. How many in the sample are unemployed?
   a. 5
   b. 4
   c. 3
   d. None of the above is correct.

29. In June 2009 the BLS reported a U.S. foreign-born population of 35.3 million. Of these, 22.7 million were employed and 1.4 million were unemployed. Based on these numbers what were the unemployment rate and the labor-force participation rate of the foreign-born U.S. population?
   a. 1.4/35.3 and 22.7/35.3
   b. 1.4/35.3 and 24.1/35.3
   c. 1.4/24.1 and 22.7/24.1
   d. None of the above are correct.

30. If the minimum wage were currently above the equilibrium wage, then a decrease in the minimum wage that kept it above the equilibrium wage would
   a. increase the surplus of labor.
   b. reduce the surplus of labor.
   c. increase the shortage of labor.
   d. reduce the shortage of labor.
31. When a union bargains successfully with employers, in that industry,  
   a. wages and unemployment increase.  
   b. wages increase and unemployment decreases.  
   c. wages decrease and unemployment increases.  
   d. wages and unemployment decrease.  

32. Suppose that efficiency wages become more common in the economy. Imposing efficiency wages  
   a. increases the quantity demanded and decreases the quantity supplied of labor.  
   b. decreases the quantity demanded and increases the quantity supplied of labor.  
   c. increases the quantity demanded and decreases the quantity supplied of labor.  
   d. decreases the quantity demanded and increases the quantity supplied of labor.  

33. Sectoral changes in demand  
   a. create frictional unemployment, while firms paying wages above equilibrium to attract a better pool of candidates creates structural unemployment.  
   b. create structural unemployment, while firms paying wages above equilibrium to attract a better pool of candidates creates frictional unemployment.  
   c. and firms paying wages above equilibrium to attract a better pool of candidates both create structural unemployment.  
   d. and firms paying wages above equilibrium to attract a better pool of candidates both create frictional unemployment.  

34. Dollar bills, rare paintings, and emerald necklaces are all  
   a. media of exchange.  
   b. units of account.  
   c. stores of value.  
   d. All of the above are correct.  

**Table 3.** The information in the table pertains to an imaginary economy.  

<table>
<thead>
<tr>
<th>Type of Money</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large time deposits</td>
<td>$80 billion</td>
</tr>
<tr>
<td>Small time deposits</td>
<td>$75 billion</td>
</tr>
<tr>
<td>Demand deposits</td>
<td>$75 billion</td>
</tr>
<tr>
<td>Other checkable deposits</td>
<td>$40 billion</td>
</tr>
<tr>
<td>Savings deposits</td>
<td>$10 billion</td>
</tr>
<tr>
<td>Traveler’s checks</td>
<td>$1 billion</td>
</tr>
<tr>
<td>Money market mutual funds</td>
<td>$15 billion</td>
</tr>
<tr>
<td>Currency</td>
<td>$110 billion</td>
</tr>
<tr>
<td>Credit card balances</td>
<td>$10 billion</td>
</tr>
</tbody>
</table>
35. Refer to Table 3. What is the M1 money supply?
   a. $215 billion  
   b. $216 billion  
   c. $226 billion  
   d. $301 billion

36. When the Federal Reserve sells assets from its portfolio to the public with the intent of changing the money supply,
   a. those assets are government bonds and the Fed’s reason for selling them is to increase the money supply.
   b. those assets are government bonds and the Fed’s reason for selling them is to decrease the money supply.
   c. those assets are items that are included in M2 and the Fed’s reason for selling them is to increase the money supply.
   d. those assets are items that are included in M2 and the Fed’s reason for selling them is to decrease the money supply.

37. In a 100-percent-reserve banking system, if people decided to decrease the amount of currency they held by increasing the amount they held in checkable deposits, then
   a. M1 would increase.  
   b. M1 would decrease.  
   c. M1 would not change.  
   d. M1 might rise or fall.

Table 4. An economy starts with $10,000 in currency. All of this currency is deposited into a single bank, and the bank then makes loans totaling $9,250. The T-account of the bank is shown below.

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>Deposits</td>
</tr>
<tr>
<td>$750</td>
<td>$10,000</td>
</tr>
<tr>
<td>Loans</td>
<td></td>
</tr>
<tr>
<td>9,250</td>
<td></td>
</tr>
</tbody>
</table>

38. Refer to Table 4. The bank’s reserve ratio is
   a. 7.50 percent. 
   b. 8.12 percent. 
   c. 92.50 percent. 
   d. 100 percent.
39. **Refer to Table 4.** If all banks in the economy have the same reserve ratio as this bank, then the value of the economy’s money multiplier is
a. 1.33.
b. 10.00.
c. 10.81.
d. 13.33.

40. **Refer to Table 4.** If all banks in the economy have the same reserve ratio as this bank, then an increase in reserves of $150 for this bank has the potential to increase deposits for all banks by
a. $866.67.
b. $1,666.67.
c. $2,000.00.
d. an infinite amount.

41. The Fed’s control of the money supply is not precise because
a. Congress can also make changes to the money supply.
b. there are not always government bonds available for purchase when the Fed wants to perform open-market operations.
c. the Fed does not know where all U.S. currency is located.
d. the amount of money in the economy depends in part on the behavior of depositors and bankers.

42. 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.

43. The price level falls. This might be because the Federal Reserve
a. bought bonds which raised the money supply.
b. bought bonds which reduced the money supply.
c. sold bonds which raised the money supply.
d. sold bonds which reduced the money supply.
44. Refer to Figure 2. If the money supply is MS₂ and the value of money is 2, then there is an excess
   a. demand for money that is represented by the distance between points A and C.
   b. demand for money that is represented by the distance between points A and B.
   c. supply of money that is represented by the distance between points A and C.
   d. supply of money that is represented by the distance between points A and B.

45. Refer to Figure 2. When the money supply curve shifts from MS₁ to MS₂,
   a. the equilibrium value of money decreases.
   b. the equilibrium price level decreases.
   c. the supply of money has decreased.
   d. the demand for goods and services will decrease.

46. If M = 10,000, P = 2, and Y = 20,000, then velocity =
   a. 4. Velocity will rise if money changes hands more frequently.
   b. 4. Velocity will rise if money changes hands less frequently.
   c. 8. Velocity will rise if money changes hands more frequently.
   d. 8. Velocity will rise if money changes hands less frequently.

47. Which of the following is not implied by the quantity equation?
   a. If velocity is stable and money is neutral, an increase in the money supply creates a proportional increase in nominal output.
   b. If velocity is stable and money is neutral, an increase in the money supply creates a proportional increase in the price level.
   c. With constant money supply and output, an increase in velocity creates an increase in the price level.
   d. With constant money supply and velocity, an increase in output creates a
proportional increase in the price level.

48. If a country experienced deflation, then
   a. the nominal interest rate would be greater than the real interest rate.
   b. the real interest rate would be greater than the nominal interest rate.
   c. the real interest rate would equal the nominal interest rate.
   d. None of the above is necessarily correct.

49. You bought some shares of stock and, over the next year, the price per share increased by 5 percent, as did the price level. Before taxes, you experienced
   a. both a nominal gain and a real gain, and you paid taxes on the nominal gain.
   b. both a nominal gain and a real gain, and you paid taxes only on the real gain.
   c. a nominal gain, but no real gain, and you paid taxes on the nominal gain.
   d. a nominal gain, but no real gain, and you paid no taxes on the transaction.

50. High and unexpected inflation has a greater cost
   a. for those who save than for those who borrow.
   b. for those who hold a little money than for those who hold a lot of money.
   c. for those whose wages increase by as much as inflation than those who are paid a fixed nominal wage.
   d. for savers in low income tax brackets than for savers in high income tax brackets.

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