ECO202: PRINCIPLES OF MACROECONOMICS
FIRST MIDTERM EXAM
SPRING 2010
Prof. Bill Even

FORM 4

Directions

1. Fill in your scantron with your unique id and form number. Doing this properly is worth the equivalent of one question.

2. There are 52 multiple choice questions.

3. Your grade is determined entirely upon the answers listed on your scantron. You will not receive your scantron back. Be sure to record your answers on your exam so that you will be able to check your answers once the key is posted.

5. You may use a calculator. Cell phones or other devices that may be used to store text are not allowed.

6. You have until the end of the period to finish the exam. Additional time may be purchased at a price of 5 percentage points per minute.

7. Academic dishonesty is a serious offense. In the event I find someone behaving in a dishonest manner, I will ask that the maximum penalty allowed by the university be imposed.
1) During 2009, many companies reduced their inventories of manufactured goods. This will mean that
   A) sales of final goods and services in 2009 will exceed production of final goods and services in 2009.
   B) production of final goods and services in 2009 will exceed sales of final goods and services in 2009.
   C) GDP for 2009 will be overstated.
   D) GDP for 2009 will be understated.

2) In the computation of GDP, social security payments count as
   A) transfer payments and are included in GDP.
   B) government expenditure on goods and services and are not included in GDP.
   C) transfer payments and are not included in GDP.
   D) government expenditure on goods and services and are included in GDP.

3) Which of the following expressions equals GDP?
   A) compensation of employees + net exports + depreciation + corporate profits
   B) compensation of employees + gross investment + rental income + depreciation + corporate profits + indirect taxes - subsidies
   C) compensation of employees + net interest + rental income + depreciation + corporate profits + proprietors' income + indirect taxes - subsidies
   D) compensation of employees + consumption + depreciation + net investment

4) In years with inflation, nominal GDP increases _______ real GDP.
   A) faster than
   B) at the same rate as
   C) slower than
   D) sometimes faster, sometimes slower, and sometimes at the same rate as

5) Gross domestic product is the total _______ produced within a country in a given time period.
   A) market value of all goods and services
   B) market value of all final and intermediate goods and services
   C) amount of final and intermediate goods and services
   D) market value of all final goods and services

6) If Nike, an American corporation, produces sneakers in Thailand this would
   A) count for both Thailand's GDP and U.S. GDP.
   B) count as part of U.S. GDP since it is a U.S. corporation.
   C) add to neither U.S. GDP nor Thailand's GDP.
   D) add to Thailand's GDP but not to U.S. GDP.

7) A ton of coal purchased by your local utility to burn to make electricity would be best described as
   A) a financial asset.  B) a final product.
   C) an intermediate good.  D) a used good.
8) GDP counts only **final** goods and services because this  
   A) method avoids including any goods that are produced this year and sold next year.  
   B) amount can be more easily determined in the marketplace.  
   C) method avoids double counting of goods going through several stages of production.  
   D) method avoids understating the value of GDP produced during a given year.

9) If we compare the four sources of spending in the economy we see that  
   A) household consumption is the largest.  
   B) government expenditure is the largest.  
   C) household consumption is the smallest.  
   D) business investment is the largest.

10) GDP using the expenditure approach equals the sum of personal consumption expenditures plus  
    A) gross private investment.  
    B) gross private investment plus government expenditure on goods and services plus net exports of goods and services.  
    C) gross private investment plus government expenditure on goods and services minus imports of goods and services.  
    D) gross private investment plus government expenditure on goods and services.

11) Gross private domestic investment is all purchases of newly produced business capital goods and buildings  
    A) plus purchases of capital goods produced in previous years to replace any depreciated capital goods.  
    B) minus the change in business inventories.  
    C) plus the change in business inventories plus residential construction.  
    D) plus fixed investment minus inventory investment.

12) The four parts of the business cycle occur in the following order:  
    A) expansion, trough, recession, peak.  
    B) recession, trough, expansion, peak.  
    C) recession, trough, peak, expansion.  
    D) expansion, trough, peak, recession.

13) Which of the following is the best definition of **potential** gross domestic product?  
    A) the value of total production  
    B) the value of total production when the economy’s resources are fully employed  
    C) the value of total production that grows at 2 percent per year  
    D) None of the above is correct.

14) Real GDP can be criticized as a measure of economic welfare because it  
    A) does not take account of the degradation of environmental quality.  
    B) does not include the value of products produced in the household.  
    C) does not include leisure time available to a society.  
    D) All of the above answers are correct.
15) Which of the following statements about the comparison between GDP in China and in the United States is correct?
   A) Using the exchange rate to value China’s GDP in dollars shows that China’s GDP per person exceeds the GDP per person in the United States.
   B) China’s GDP per person is higher using purchasing power parity prices rather than the exchange rate when valuing China’s GDP in dollars.
   C) Using purchasing power parity prices to value China’s GDP in dollars shows that China’s GDP per person exceeds the GDP per person in the United States.
   D) None of the above answers are correct because they are all false statements.

16) Which of the following would lead GDP to overstate economic welfare?
   A) restaurant workers that under-report tip income
   B) the existence of home-cooked meals
   C) a self-employed CPA who takes a longer than normal vacation
   D) electric utilities that switch to burning coal because of higher natural gas prices and thereby create more acid rain pollution

17) If the number of people unemployed is 100, the number of people employed is 1000, and the working-age population is 1400, then the labor force is
   A) 1400.  B) 1100.  C) 1500.  D) 1000.

18) If 1 million unemployed workers quit searching for work because they become discouraged, the unemployment rate will _____ and the labor force participation rate will _______
   A) rise; fall  B) not change; fall  C) fall; fall  D) none of the above

19) Over the last forty years in the U.S., the labor force participation rate _______ and the employment-to-population ratio _______.
   A) decreased; decreases  B) decreased; increased  C) increased; increased  D) increased; decreased

20) Which of the following could cause the unemployment rate to rise at the same time that the labor force participation rate rises?
   A) 1 million people who were previously employed decide to retire
   B) 1 million people who were previously retired decide to start searching for work
   C) 1 million people who were previously employed are laid off and start searching for work.
   D) none of the above

21) During a recession, the labor force participation rate tends to _______ than the employment population ratio.
   A) fall more  B) rise more  C) rise less  D) fall less
22) The economy is at full employment when
   A) all unemployment is frictional or structural.
   B) all unemployment is cyclical.
   C) there are no unemployed workers.
   D) there are fewer unemployed workers than available jobs.

23) Suppose that over a period of years the country of Quasiland switched from being an agriculturally-based economy to a technologically-based economy. As a result, many people lost jobs because they lacked the correct skills. These people would be considered part of
   A) frictional unemployment.  
   B) structural unemployment.
   C) discouraged workers.  
   D) cyclical unemployment.

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<tr>
<th>Component</th>
<th>Number of people (millions)</th>
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<tbody>
<tr>
<td>Under 16</td>
<td>50</td>
</tr>
<tr>
<td>Working full-time</td>
<td>90</td>
</tr>
<tr>
<td>Working part-time</td>
<td>30</td>
</tr>
<tr>
<td>Retired</td>
<td>40</td>
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<tr>
<td>Unemployed</td>
<td>5</td>
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24) Using the data in the above table, the unemployment rate is
   A) 28.0 percent.  
   B) 4.0 percent.  
   C) 5.55 percent.  
   D) 4.16 percent.

25) Using the data in the above table, the labor force participation rate is
   A) 75.7 percent.  
   B) 66 percent.  
   C) 96.0 percent.  
   D) 58.1 percent.

26) Which of the following would be most likely to lead to an increase in the natural rate of unemployment?
   A) an increase in the generosity of unemployment insurance since this would be likely to cause workers to remain unemployed longer between jobs.
   B) an increase in the rate of technological innovation since this means that a larger number of workers will see their jobs become obsolete and structural unemployment will rise.
   C) a recession this causes an increase in the number of workers who lose their jobs.
   D) both a and b.

27) When the economy moves into and out of recessions and expansions, the unemployment rate fluctuates around the
   A) natural unemployment rate.  
   B) frictional unemployment rate.
   C) cyclical unemployment.  
   D) structural unemployment rate.

28) If the basket of goods and services used to calculate the CPI cost $200 in the reference base period and $450 in a later year, the CPI for the latter year equals
   A) 200.  
   B) 450.  
   C) 325.  
   D) 225.
29) If the CPI was 122.3 at the end of last year and 124.5 at the end of this year, the inflation rate between these two years was
   A) 22.5 percent.  B) 2.5 percent.  C) 18.0 percent.  D) 1.8 percent.

30) Because of the biases in calculating the CPI, the true growth in the cost of living is
   A) more than the measured inflation rate by about 1 percent per year.
   B) less than the measured inflation rate by about 1 percent per year.
   C) accurately measured.
   D) more than the measured inflation rate by about 1 percent per month.

31) Substitution bias in the CPI refers to the fact that the CPI
   A) substitutes quality changes whenever they occur without taking account of the cost of the quality changes.
   B) takes no account of the substitution of goods by consumers when relative prices change.
   C) substitutes relative prices for absolute prices of goods.
   D) takes into account the substitution of goods by consumers when relative prices change.

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<th></th>
<th>CPI basket quantity</th>
<th>2003 price</th>
<th>2009 price</th>
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<tbody>
<tr>
<td>CDs</td>
<td>10 discs</td>
<td>$16 per disc</td>
<td>$12 per disc</td>
</tr>
<tr>
<td>Gasoline</td>
<td>200 gallons</td>
<td>$1.00 per gallon</td>
<td>$1.25 per gallon</td>
</tr>
</tbody>
</table>

32) If 2003 is the reference base period, what is the price index for the CPI basket of goods for 2009 in the above table?
   A) 102.8
   B) 128.0
   C) 97.3
   D) zero because the price of CDs fell and the price of gasoline increased

33) If the bias in construction of the CPI was eliminated
   A) government transfer payments would rise at a slower rate
   B) government tax revenue would rise at a faster rate
   C) the government budget deficit would shrink
   D) all of the above

34) If the CPI grows from 80 to 120 between 2000 and 2010, $1 in 2000 would have the same purchasing power as ____ in 2010.
   A) $1.20
   B) $0.75
   C) $1.50
   D) $0.67

35) If real GDP per person is growing at 4 percent per year, approximately how many years will it take to double?
   A) 4
   B) 25
   C) 17.5
   D) 8

36) Suppose that between 2000 and 2010 the CPI grows from 80 to 120 and the nominal wage rises from $10 to $16. This means that the real wage over the period would have
   A) increased by 6.7%
   B) decreased by 6.7%
   C) increased by 5.2%
   D) decreased by 5.2%
37) Suppose that there is an innovation in technology that makes labor 20% more productive. Given the effects on the labor market and the aggregate production function, we should expect that in the short term, employment will ______ and real GDP per capita will ______.
   A) fall; rise  B) fall; fall  C) rise; rise  D) rise; fall

38) Which of the following could simultaneously lead to increased employment and reduced labor productivity?
   A) a decrease in the generosity of Social Security since labor supply would increase
   B) a higher tax on business investments since investment would decrease.
   C) a higher tax on labor earnings since labor supply would increase.
   D) all of the above

39) The curvature of the production function shows that as employment increases, the productivity of labor
   A) decreases and becomes negative.  B) remains positive but decreases.
   C) remains constant.  D) remains positive and increases.

40) Suppose that the U.S. allows an additional 1 million immigrants into the U.S. whose skills are similar to the average American in the U.S. This should lead to ____ real wages and ____ productivity.
   A) lower; decreased  B) lower; higher
   C) lower; the same  D) none of the above

41) Suppose the United States spends more on foreign goods and services than foreigners spend on our goods and services and the United States sells no foreign assets. Then the
   A) United States must borrow an amount equal to national saving.
   B) United States must borrow an amount equal to consumption expenditure plus investment.
   C) rest of the world may or may not finance the U.S. trade deficit.
   D) United States must borrow an amount equal to imports minus exports.

42) The ______ interest rate approximately equals the ______ interest rate minus ______.
   A) real; nominal; the inflation rate  B) real; nominal; depreciation
   C) nominal; real; the inflation rate  D) nominal; real; depreciation

43) If capital per hour of labor grows by 3 percent a year and labor productivity grows by 2.5 percent a year, the one third rule says that the growth in labor productivity can be divided so that capital growth accounted for ____ percentage points and technological change accounted for ____ percentage points.
   A) 2.5; 2.5  B) 1.0; 1.0  C) 1.0; 1.5  D) 3.0; −0.5

44) Classical economists believed that
   A) the population growth would decrease as real wage rates rise.
   B) real wage rates would never rise above their subsistence level in the long run.
   C) the labor supply would increase because real wage rates would fall as a result of technological progress.
   D) real wage rates would rise above their subsistence level in the long run.
45) If the government begins to run a larger budget deficit, then assuming there is no Ricardo–Barro effect, the demand for loanable funds _______ and the real interest rate _______.
   A) decreases; falls  B) increases; rises  
   C) increases; falls  D) decreases; rises

46) If the government begins to run a larger budget deficit, then assuming there is no Ricardo–Barro effect, private investment _______ and private saving _______.
   A) increases; falls  B) decreases; rises  
   C) increases; rises  D) decreases; falls

47) If borrowers and lenders expect 5% inflation over the next year and it turns out to be 8%,
   A) borrowers and lenders both lose  B) borrowers lose and lenders win  
   C) borrowers and lenders both win  D) borrowers win and lenders lose

48) If households begin to believe that their incomes will be lower next year, we should see
   A) a decrease in the demand for loanable funds and lower real interest rates  
   B) an increase in the demand for loanable funds and higher real interest rates  
   C) an increase in the supply of loanable funds and lower real interest rates  
   D) a decrease in the supply of loanable funds and higher real interest rates

49) In the U.S. market for loanable funds, the supply comes from
   A) only saving  
   B) saving, the government budget surplus and lending from foreign countries.  
   C) only saving and the government budget surplus  
   D) only the government budget surplus and loans from foreign countries

50) According to the Ricardo–Barro effect,
   A) government budget deficits increase households’ expected future disposable income.  
   B) households increase their personal saving when governments run budget deficits.  
   C) taxpayers fail to foresee that government deficits imply higher future taxes.  
   D) government deficits raise the real interest rate.
51) If U.S. net exports are positive,
   A) other countries make loans to the United States so that the United States can pay for some of the goods it purchases from other countries.
   B) the United States borrows from other countries to pay for some of the goods the United States purchases from them.
   C) the United States sells some of the assets it owns in other countries to pay for some of the goods it sells to other countries.
   D) other countries borrow from the United States to pay for some of the goods they purchase from the United States.

52) The United States regularly runs a trade ________ and therefore ________.
   A) deficit; loanable funds flow out of the United States
   B) surplus; loanable funds are sent to the United States
   C) surplus; loanable funds flow out of the United States
   D) deficit; loanable funds are sent to the United States