ECO202: PRINCIPLES OF MACROECONOMICS
FIRST MIDTERM EXAM
SPRING 2007
Prof. Bill Even

FORM 1

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 38 multiple choice questions.

3. Your grade is determined entirely upon the answers listed on your scantron.

4. 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. No extra time will be allowed.

7. Academic dishonesty is a serious offense. In the event I find someone behaving in a dishonest manner, I will request that the maximum penalty allowed by the university be imposed.
1) If the U.S. has a trade surplus, exports are \textit{(less than, greater than)} imports and the U.S. is a net \textit{(borrower, lender)} with the rest of the world.
   a. less than; borrower.
   b. less than; lender.
   c. greater than; borrower.
   d. greater than; lender.

2) The federal government's budget deficit
   a. tends to be procyclical because tax revenues fall and spending rises during an expansion.
   b. tends to be procyclical because tax revenues rise and spending falls during an expansion.
   c. tends to be countercyclical because tax revenues rise and spending falls during an expansion.
   d. none of the above.

3) The expenditure side of GDP is measured as:
   a. consumption + investment + government purchases + net exports
   b. consumption + saving + taxes
   c. consumption + saving + government purchases + net exports
   d. employee compensation + rent + net interest + profits + indirect taxes - subsidies

4) Because of the relationship between the income and expenditure side of GDP, which of the following equalities are true?
   a. saving + taxes = investment + government spending + net exports.
   b. saving - taxes = investment + government spending + net exports.
   c. saving + taxes = investment - government spending - net exports
   d. none of the above.

5) Suppose that the stock of capital at the beginning of 2004 is $100 and at the beginning of 2005 it is $120. Based on this information, it would be correct to conclude that
   a. gross investment during 2004 was $20.
   b. gross investment exceeded depreciation by $20 during 2004.
   c. depreciation exceeded gross investment by $20 during 2004.
   d. net investment was $20 less than gross investment during 2004.

6) Which of the following is the largest part of the \textit{INCOME} side of GDP?
   a. consumption.  
   b. wages.  
   c. rent.  
   d. interest.
7) Based on the information provided, nominal GDP in 2006 is _____.
   a. $13,013.9 billion   b. $9,840.3 billion   c. $10,371 billion   d. $12,793 billion

8) Based on the information provided, prices in 2006 are _____ percent higher than in 1990.
   a. 35.4   b. 43.0   c. 15.0   d. 17.3

9) Based on the information provided, the average annual rate of inflation between 1990 and 2006 was _____ percent.
   a. 1.8%   b. 2.3%   c. 2.7%   d. 3.1%

10) Based on the information provided, in 2006 there were _____ people employed (answer is given in 1000s)
    a. 216,839   b. 167,239   c. 124,671   d. 143,066

11) Suppose that between 2006 and 2007 the employment-population ratio and the unemployment rate both rise. Which of the following could cause this to occur?
    a. 1 million people who were out of the labor force in 2006 begin searching for work and 900,000 of them find jobs.
    b. 1 million people who were unemployed in 2006 find jobs in 2007.
    c. 1 million people who were employed in 2006 retire in 2007.
    d. none of the above.

12) Nominal GDP in 2006 is ______ and real GDP in 2006 is ______.
    a. $300; $300   b. $175; $300   c. $300; $175   d. none of the above.

13) The GDP deflator in 2006 (rounded to nearest integer) is:
    a. 137   b. 171   d. 58   d. none of the above.
14) A comparison of the GDP per capita in the U.S. and China would overstate the U.S. advantage in standard of living if:
   a. on average, people in China do more home production (e.g. grow their own food) than people in the U.S.
   b. on average, people in China work more hours per week.
   c. if China has fewer goods produced in the underground economy.
   d. all of the above.

15) Over the course of the business cycle, which of the following changes the least during a recession?
   a. the unemployment rate.
   b. the labor force participation rate.
   c. the employment-population ratio.

16) During a recession, unemployment duration tends to ____ causing the pain of unemployment to be ____
   concentrated in the population.
   a. rise; more.  
   b. rise; less.  
   c. fall; more.  
   d. fall; less

17) If a worker decides she wants to move to Alaska, quits her job in Ohio and begins searching for work after her move to Alaska, she is considered:
   a. frictionally unemployed.
   b. structurally unemployed.
   c. cyclically unemployed.
   d. naturally unemployed.

18) If the unemployment rate equals the natural rate,
   a. there is zero percent unemployment.
   b. there is only structural unemployment.
   c. there is only frictional unemployment.
   d. none of the above.

19) Compared to the 1970s, the natural rate of unemployment since 2000 is:
   a. lower because the baby boom is older leading to less frictional unemployment.
   b. lower because the baby boom is older leading to less structural unemployment.
   c. higher because the baby boom is older leading to more cyclical unemployment.
   d. higher because the baby boom is older leading to more structural unemployment.

20) The category of goods with the greatest weight in the Consumer Price Index is:
   a. housing.  
   b. transportation.  
   c. medical care.  
   d. taxes.

21) Between January 1980 and January 2006, the CPI increased from 78 to 203. The base year for the CPI is 1983. Based on this information, if a person earned a nominal wage of $5 per hour in 1980, their nominal wage in 2006 would have to be _____ in order that their wages have the same purchasing power as in 1980.
   a. $13.01  
   b. $10.15  
   c. $8.01  
   d. $7.37

22) Between January 1980 and January 2006, the CPI increased from 78 to 203. The base year for the CPI is 1983. Based on this information, $1 in 2006 would have the same purchasing power as ______ in 1980.
   a. $2.60  
   b. $0.38  
   c. $2.03  
   d. $0.49

23) The growth rate of the CPI tends to (over-, under-) state the true growth in the cost of living and if this was corrected
   a. over; government tax revenues would rise at a faster rate over time.
   b. over; government spending would rise at a faster rate over time.
   c. under; government tax revenues would rise at a slower rate over time.
   d. under; government spending would rise at a faster rate over time.
24). A profit maximizing firm will always hire another hour of labor if:
   a. the marginal product of the labor exceeds the real wage rate.
   b. the average product of the labor exceeds the real wage rate.
   c. the marginal product of the labor is less than the real wage rate.
   d. the average product of the labor is less than the real wage rate.

To answer the next 2 questions, refer to the classical model represented by the labor market and production functions in the diagrams below.

25) If the real wage was $6, there would be
   a. a shortage of labor and there would be downward pressure on real wages.
   b. a surplus of labor and the unemployment rate would be above the natural rate.
   c. a surplus of labor and there would be downward pressure on real wages.
   d. a shortage of labor and the unemployment rate would be below the natural rate.

26) At the current equilibrium described,
   a. the average product of labor is $33.33 and the marginal product of labor is greater than $33.33.
   b. the average product of labor is $33.33 and the marginal product of labor is less than $33.33.
   c. the marginal product of labor is $33.33 and the average product of labor is less than $33.33.
   d. the marginal product of labor is $33.33 and the average product of labor is greater than $33.33.

27) Based on the classical model of the economy, if there is a technological innovation that makes it easier to complete household duties such as cleaning or cooking, we should expect:
   a. real wages will drop, productivity will fall, and potential GDP will rise because labor supply will increase.
   b. real wages will drop, productivity will rise, and potential GDP will rise because labor supply will increase.
   c. real wages will rise, productivity will rise, and potential GDP will rise because labor demand will increase.
   d. real wages will drop, productivity will fall, and potential GDP will rise because labor demand will increase.
28) Suppose that there is a simultaneous increase in the real wage rate and an increase in potential GDP. This could be the result of:
   a. an increase in the amount of human capital in the economy.
   b. more immigration into the economy.
   c. a cut in the income tax rate.
   d. all of the above.

29) When wages rise, the income effect will cause workers to work (more, less) hours and the substitution effect will cause them to work (more; less) hours.
   a. more; more.  b. more; less.  c. less; less.  d. less; more.

30) According to the permanent income hypothesis,
   a. a person will save whenever her current year’s income is above her permanent income.
   b. a person’s savings will fluctuate more over time than her income.
   c. a person’s consumption will fluctuate less over time than her income.
   d. all of the above.

31) According to the permanent income hypothesis,
   a. if a person receives a temporary increase in income, most of it will be saved.
   b. if a person experiences a sudden increase in their wealth (for example, from an increase in stock prices), saving will fall.
   c. if a person receives a permanent increase in income, most (perhaps all) of the increase will be spent.
   d. all of the above.

32) As interest rates rise,
   a. the wealth effect will induce more savings for borrowers.
   b. the wealth effect will induce less savings for savers.
   c. the substitution effect will induce more savings for borrowers and savers.
   d. all of the above.

33) As interest rates rise,
   a. investment will decline because of the substitution effect.
   b. investment will rise because of the substitution effect.
   c. investment will fall because fewer projects will have a profit rate (internal rate of return) that lies above a higher interest rate.
   d. investment will rise because more projects will have a profit rate (internal rate of return) that falls below the higher interest rate.

34) If the government eliminated tax incentives for IRAs (individual retirement accounts), we should expect:
   a. lower interest rates and less investment because investment demand would decrease.
   b. higher interest rates and less investment because savings would decrease.
   c. higher interest rates and more investment because savings would decrease.
   d. lower interest rates and more investment because savings would increase.

35) If the government is able to reduce the budget deficit over the next several years, this should lead to:
   a. an increase in savings, lower interest rates, and more investment.
   b. an increase in savings, lower interest rates, and less investment.
   c. an increase in savings, higher interest rates, and more investment.
   d. a decrease in savings, higher interest rates, and more investment.

36) According to the Wall Street Journal article presented in class,
   a. productivity growth in the U.S. slowed in the most recent quarter.
   b. greater productivity growth helps reduce inflationary pressures.
   c. greater productivity growth helps improve the standard of living in the U.S.
   d. all of the above.
37). The real interest rate is defined as:
   a. the nominal interest rate divided by the price level.
   b. the nominal interest rate plus the inflation rate.
   c. the nominal interest rate minus the inflation rate.
   d. none of the above.

38) If over the next year the nominal interest rate rises 3% and the real interest rate rises 2%,
   a. inflation must have increased by 1%.
   b. inflation must be 1%.
   c. inflation must have decreased by 1%.
   d. inflation must be -1%.
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