

The final exam in Econ 101-008 will take place at noon on December 18, 2009 in our regular classroom (Carroll 111). The examination will include questions from all parts of our course but will include more questions from the topics covered by lectures 19 and 21-29. To prepare for the examination, we recommend that you review the questions from midterm examinations one and two and work through the following questions that cover lectures 19 and 21-29.

Assume normal shapes to demand and supply schedules and no external effects unless instructed otherwise.

1. Which of the following correctly describes the relationship between productivity growth, unemployment, and the economy's production possibilities frontier (PPF)?
 - A. An increase in productivity moves the economy from inside the production possibilities set to its frontier.
 - B. An increase in productivity shifts the economy from the production possibilities frontier to a point outside the production possibilities set.
 - C. An increase in unemployment shifts the economy further inside its production possibilities set.
 - D. An increase in unemployment shifts the economy from a point outside the production set back to the production possibilities frontier.

2. If the CPI in Tar Heel Land is 1.00 in 2005, 0.98 in 2006, and 1.02 in 2007 then
 - A. Tar Heel Land experienced inflation in 2006 and deflation in 2007.
 - B. Tar Heel Land experienced deflation in 2006 and inflation in 2007.
 - C. Tar Heel Land experienced a small rate of inflation in 2006 and 2007.
 - D. Prices in Tar Heel Land rose by 4 percent between 2005 and 2007.

3. The following table reports transactions that occurred in Small Land in 2006. Nominal GDP in Small Land in 2006 is _____.

Item	Price per Unit	Quantity
Loaves of Bread	\$2	20
Pounds of Butter	\$5	20
Used Bicycles	\$40	5
Shares of IBM Stock	\$10	15
Hours of Day Care	\$3	10

- A. \$170
 - B. \$320
 - C. \$370
 - D. \$520

4. For years the citizens of Small Land had experienced an annual inflation rate of 3 percent and had come to think of 3 percent as the normal rate of inflation. Then, in 2006, the rate of inflation rose to 6 percent. Which of the following statements correctly describes the winners and losers from inflation in 2006?
 - A. No one benefited because the rise in inflation created dead weight loss.
 - B. Small Land debtors benefited at the expense of Small Land creditors.
 - C. Small Land savers benefited at the expense of Small Land investors.
 - D. Small Land workers benefited at the expense of Small Land employers.

5. Consider the following national accounts data for Tar Heel Land.

Year	Pizza		Milkshakes		Tutoring	
	Pies	Price	Glasses	Price	Hours	Price
2005	100	\$8.00	50	\$2.00	50	\$10.00
2006	125	\$9.00	40	\$2.10	50	\$12.00
2007	115	\$10.00	60	\$2.40	50	\$8.00

If real GDP is measured in 2005 dollars, then in 2007 in Tar Heel Land, real GDP is _____ and nominal GDP is _____.

- A. \$1540, \$1540
 B. \$1540, \$1694
 C. \$1761, \$1540
 D. \$1694, \$1694
6. Which of the following statements about labor productivity in the United States is correct?
 A. Growth in labor productivity is less important than growth in the participation rate in accounting for increases in output per capita.
 B. Growth in labor productivity began slowing in 1990 and has remained low since.
 C. High labor productivity in the U.S. is partly attributable to quantity and quality of education received by students in the U.S.
 D. Cross country data on the amount of time spent in school by students of various nations shows that education is a weak factor in accounting for labor productivity.
7. At each family gathering, your grandfather points out that when he was a boy the price of a loaf of bread was ten cents. He decries the fact that the price of bread today is more than two dollars a loaf and concludes that times are bad. Which of the following is a response to your grandfather that is well reasoned economically?
 A. Bread today is better and the higher price today reflects the improved quality.
 B. Today our nation is consuming a larger fraction of GDP than it was when your grandfather was a boy.
 C. Inflation makes it impossible to compare the price of bread today with the price of bread when your grandfather was a boy.
 D. Today, the ratio of the price of bread to the hourly wage is smaller than it was when your grandfather was a boy.
8. The following table contains data for the consumer price index and the nominal rate of interest in Small Land in year 1 through year 4.

Year	Consumer Price Index	Nominal Interest Rate (percent)
1	100	12
2	110	15
3	120	13
4	115	8

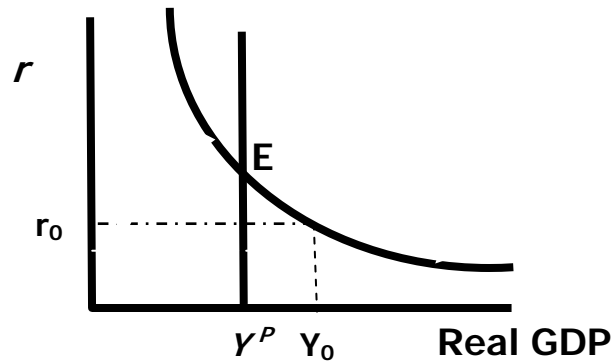
The real rate of interest in year 3 in Small Land was _____.

- A. 8.5 percent
 B. 13.0 percent
 C. 17.2 percent
 D. Cannot be determined from the available data.

9. Suppose your friend Jan asks to borrow \$100 today. Jan agrees to pay you back in one year. Jan agrees to pay you \$103.00 plus one extra dollar for each percent of inflation that occurs in the coming year. Jan always keeps promises. Should you accept Jan's offer?
- It depends on the value to you of your next best use of the \$100.
 - Yes, because you experience no inflation risk from this loan.
 - No, because you care about the real rate of interest rather than the nominal rate.
 - It depends on your estimate of the inflation rate over the coming year.
10. An increase in the real rate of interest causes a(n) _____ in private investment because the high real rate implies that _____.
- Increase, firms will earn high real returns on their investment projects.
 - Decrease, firms will earn high real returns on their investment projects.
 - Increase, firms can earn a high return by lending their funds to others.
 - Decrease, firms can earn a high return by lending their funds to others.
11. Suppose an increase in government spending on military equipment leads to an increased government budget deficit. If no other changes occur, there will be a(n) _____ in national saving and a(n) _____ in the real interest rate.
- Increase, Increase
 - Increase, Decrease
 - Decrease, Decrease
 - Decrease, Increase
12. If people in the United States are less patient than people in Japan, the typical US person will save _____ at a given real interest rate. If technological innovation causes Japanese capital to be more productive than U.S. capital, the typical Japanese firm will demand _____ funds for investment at a given interest rate.
- More, More
 - More, Less
 - Less, More
 - Less, Less
13. One reason that aggregate demand is inversely related to the real rate of interest is that
- Investment rises when returns are high.
 - Government spending falls when the real rate rises
 - Increasing the real rate implies that the economy can "buy" less.
 - Consumption falls when the real rate rises.
14. Which of the following will unambiguously cause the real rate of interest to fall?
- Households reduce saving and there is an increase in U.S. exports.
 - Firms think investment is less profitable and government increases its budget deficit.
 - The Federal Reserve buys government bonds and household saving increases.
 - The Federal Reserve sells government bonds and household saving increases.
15. Which of the following would increase potential output in the short run?
- A decrease in the unemployment rate from 6% to 5%.
 - An increase in the real rate of interest.
 - An increase in government spending on social programs.
 - An increase in the number of persons in the labor supply.

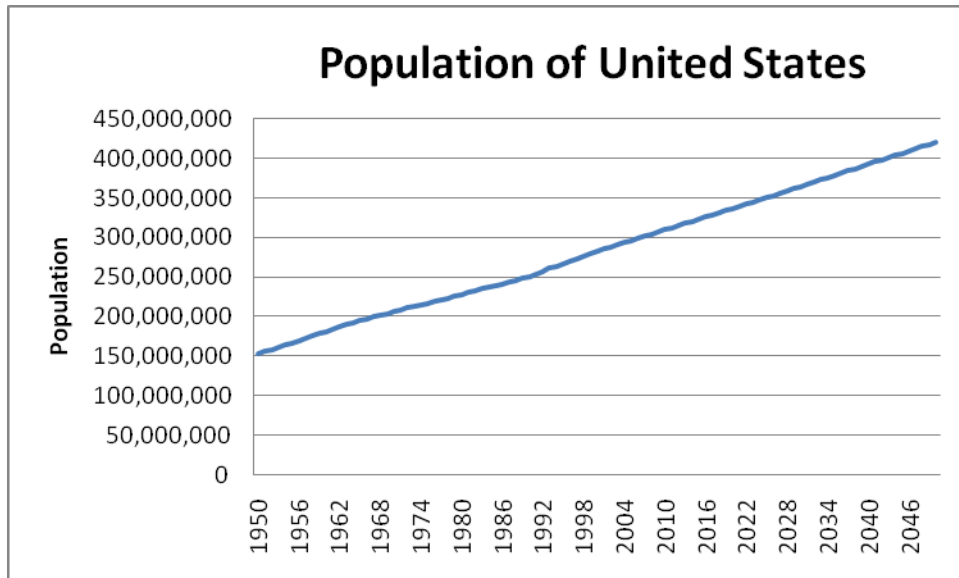
16. Suppose the new U.S. Congress balances the Federal budget with a mixture of tax increases and spending cuts. As a result, the real rate of interest will _____ and the new level of investment will _____.
- A. Increase, Increase
 - B. Increase, Decrease
 - C. Decrease, Decrease
 - D. Decrease, Increase
17. According to our macroeconomic model, which of the following shocks would be **least likely** to increase the rate of inflation? Assume no change in Federal Reserve policy.
- A. A surprising increase in consumer spending.
 - B. An increase in the tax on corporate profits.
 - C. A fall in the value of the dollar.
 - D. A surprising slowdown in the growth rate of potential output.
18. Which of the following best explains the inverse relationship between the unemployment rate and the inflation rate?
- A. When resources are not used, the opportunity cost of those resources increases and so does the inflation rate.
 - B. A high inflation rate raises capital investment and lowers the unemployment rate.
 - C. An increase in the unemployment rate causes the price of substitute inputs to increase and results in inflation.
 - D. When aggregate demand is very high, unemployment is low, wages rise rapidly and inflation increases.
19. Which of the following best explains why increasing the interest rate will help to lower the inflation rate? A higher interest rate will _____.
- A. Lower imports.
 - B. Lower expenditures on capital-building projects.
 - C. Raise the level of saving.
 - D. Raise government spending on roads, bridges and infrastructure.
20. Suppose the country “Poor Land” has experienced a high unemployment rate for many years. Which of the following would be a policy that might lower unemployment? To lower unemployment, the policy authority should _____.
- A. Raise the tax rate on corporate profits.
 - B. Raise the Federal Funds rate.
 - C. Lower taxes on imported goods
 - D. Lower the Federal Funds rate.
21. The _____ independent is a central bank the lower the inflation rate the nation experiences because _____.
- A. More, the central bankers are immune from political pressure.
 - B. Less, Congress and the central bankers work together to keep prices in line.
 - C. More, Congress and the central bankers work together to keep prices in line.
 - D. Less, the central bank is more sensitive to economic problems.
22. The current recession and the sub-prime mortgage crisis were triggered by _____.
- A. A decrease in US stock prices.
 - B. An increase in the mortgage default rate.
 - C. A decrease in US housing prices.
 - D. An increase US interest rates.

Use the following diagram to answer the next two questions. The diagram depicts an economy in equilibrium at real GDP Y_0 and real interest rate r_0 .



23. The proper Federal Reserve policy given the pictured situation is:
- An increase in the Federal Funds rate.
 - A decrease in the Federal Funds rate.
 - An increase in government spending.
 - A decrease in government spending.
24. The Federal Reserve may be unwilling to raise the interest rate by enough to return the economy to potential output because it fears a _____ shock to _____ that will cause _____.
- Positive, potential output, inflation.
 - Negative, aggregate expenditure, unemployment.
 - Positive, aggregate expenditure, inflation.
 - Negative, potential output, unemployment.
25. The 1960's was a high growth decade. The Federal Reserve forecast that the same high growth was possible for the 1970's. When growth was slower than expected, the Fed lowered interest rates to stimulate the economy. The result was an increase in the inflation rate. Which of the following correctly uses our macroeconomic model to explain the inflation of the 1970's? The Fed thought that potential output was _____ than it turned out to be and thus the Fed provided _____ economic stimulus.
- Higher, Too much
 - Higher, Too little
 - Lower, Too much
 - Lower, Too little
26. In the third quarter of 2009, the U.S. economy experienced _____ growth in real GDP, _____ growth in the general level of prices.
- Positive, Positive
 - Positive, Negative
 - Negative, Positive
 - Negative, Negative

27. The following table contains data on the population of the United States between 1950 and 2046. The data for future years are projections.



- The data in the chart imply a growth rate in population of about ____ percent per year between 1950 and 2046 in the United State.
- A. 1.2.
 - B. 1.8.
 - C. 2.5.
 - D. 2.8.
28. In 2009, per capita real GDP in Z-land was \$1000 and the real GDP growth rate was 5 percent. Provided that growth continues at the same average rate, which of the following is the most reasonable estimate of real GDP per capita in Z-land in 2029?
- A. \$1000.
 - B. \$2000.
 - C. \$2650.
 - D. \$5000.