

Sample Exam 3

Part 1: Terms, Numeric Solutions, and Short Answer

1. The figure below illustrates one common way of thinking about the behavior of aggregate output over time.

a. What business cycle term is used to describe *points* such as A? _____

b. What business cycle term is used to describe *points* such as B? _____

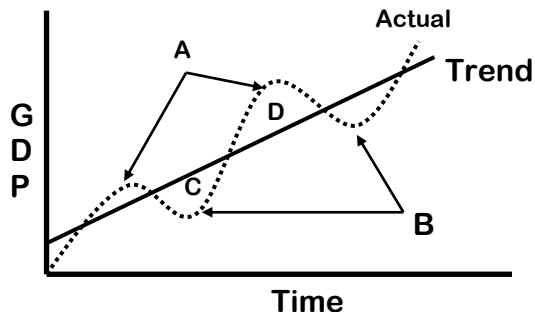
c. What business cycle term used to describe a *segment* such as that from B to A?

d. What business cycle term used to describe a *segment* such as that from A to B?

e. What business cycle term is used to describe an *area* such as C? _____

e. What business cycle term is used to describe an *area* such as D? _____

g. Complete this statement: In an area such as C, it is likely that the unemployment rate will _____ and the inflation rate will _____.



2. Aggregate income accounting.

a. What are the four broad categories or components of GDP in the expenditure approach to national income accounting?

b. Which of these four categories is historically the most stable in terms of quarterly rates of change?

c. Which of these four categories is historically the most volatile in terms of quarterly rates of change?

Use the following data related to population, aggregate output and prices for questions #3 and #4:

	<u>2002</u>	<u>2003</u>	<u>2004</u>
Population (millions)	285	288	291
Nominal GDP (billions)	\$10,469.6	\$10,971.2	\$11,734.3
GDP Price Deflator	104.188	106.304	109.098

3. Nominal and real GDP.
 - a. What was the growth rate of nominal GDP between 2002 and 2003?
 - b. What was the value of real GDP in 2002?
 - c. What was the growth rate of real GDP between 2002 and 2003?
4. Per capita GDP.
 - a. What was the value of per capita real GDP in 2002?
 - b. What was the growth rate of per capita real GDP between 2002 and 2003?
 - c. If, in a given year, nominal GDP increased by 6%, prices rose by 4%, the population grew by 1%, would the standard of living be improved or diminished?
5. If real GDP grows by 3% per year while the population grows by 1% per year ...
 - a. How long will it take for a country's aggregate output to double?
 - b. How long will it take for a country's standard of living (per capita real GDP) to double?
6. In January 1994, the Bureau of Labor Statistics reported that during 1993 the Civilian Non-institutional population of the U.S. was 193,550,000, the Labor Force Participation Rate was 66.2%, and that 119,389,000 people were employed. Based on this information, what was the U.S. unemployment rate in 1993?

7. Consider the balance sheets below for Terre Incognita National Bank:
- Fill in the missing values on Balance Sheet A assuming that the required reserve ratio is 10%.
 - Using your completed Balance Sheet A as a starting point, fill in the missing values on Balance Sheet B assuming that the Federal Reserve purchases 100 of bonds from Terre Incognita National Bank.
 - If the purchase of bonds in part B is the only such purchase in the banking system, what is the maximum amount of new loans that could be generated *by the entire banking system*? _____

Balance Sheet A				Balance Sheet B			
ASSETS		LIABILITIES		ASSETS		LIABILITIES	
Bonds		Deposits	1,000	Bonds		Deposits	1,000
Loans	700			Loans			
Required Reserves				Required Reserves			
Excess Reserves	0			Excess Reserves	0		

8. What are three different policy actions that the Federal Reserve could take to decrease the money supply and raise interest rates?

Part 2: Multiple Choice

- Suppose that over the last ten years productivity grew faster in Oceania than in Freedonia and the population of both countries was unchanged.
 - It follows that real GDP per person must be higher in Oceania than in Freedonia.
 - It follows that real GDP per person grew faster in Oceania than in Freedonia.
 - It follows that the standard of living must be higher in Oceania than in Freedonia.
 - All of the above are correct.
- Suppose over the last year that the price of iron ore increased from \$1,200 a ton to \$1,300 a ton. Over the same time a measure of the overall price level increased from 168 to 187. The price of iron ore increased by
 - less than inflation, and this means it became relatively less scarce.
 - less than inflation, and this means it became scarcer.
 - more than inflation, and this means it became scarcer.
 - more than inflation, but this doesn't necessarily mean that it become scarcer.
- Long-term trends in demand that make some goods obsolete are likely to have their greatest impact on:
 - Structural unemployment.
 - Frictional unemployment.
 - Cyclical unemployment.
 - Seasonal unemployment.

4. Government policies to encourage saving are meant to:
 - a. Promote economic growth in the long run by fostering new investment.
 - b. Increase the level of consumption.
 - c. Decrease aggregate supply.
 - d. Discourage present consumption that is wasteful.

5. Stock represents
 - a. a claim to a share of the profits of a firm.
 - b. ownership in a firm.
 - c. equity finance.
 - d. All of the above are correct

6. Other things the same, bonds are likely to have higher interest rates if they have
 - a. tax exemptions and short terms.
 - b. tax exemptions and long terms.
 - c. no tax exemptions and short terms.
 - d. no tax exemptions and long terms.

7. Other things the same, an increase in the interest rate
 - a. would shift the demand for loanable funds to the right.
 - b. would shift the demand for loanable funds to the left.
 - c. would increase the quantity of loanable funds demanded.
 - d. would decrease the quantity of loanable funds demanded.

8. Suppose that Congress were to institute an investment tax credit. What would happen in the market for loanable funds?
 - a. The demand for loanable funds would shift left.
 - b. The supply of loanable funds would shift left.
 - c. The demand for loanable funds would shift right.
 - d. The supply of loanable funds would shift right.

9. Suppose the government deficit increases, but the interest rate remains the same. Which of the following things might have happened simultaneously to keep interest rates the same?
 - a. The government reduces the amount that people may put into savings accounts on which the interest is tax exempt.
 - b. Because they are optimistic about the future of the economy, firms desire to borrow more to purchase physical capital.
 - c. Consumers decide to decrease consumption and work more.
 - d. All of the above could explain why the interest rate would be unchanged.

10. Diversification of a portfolio
 - a. can eliminate market risk, but it cannot eliminate firm-specific risk.
 - b. can eliminate firm-specific risk, but it cannot eliminate market risk.
 - c. increases the portfolio's standard deviation.
 - d. is not necessary for a person who is risk averse.

11. When a person engages in detailed analysis of a company to determine its value, he or she is engaging in
 - a. standard deviation analysis.
 - b. informational analysis.
 - c. fundamental analysis.
 - d. efficiency analysis.

12. The efficient markets hypothesis says that
 - a. only individual investors can make money in the stock market.
 - b. it should be difficult to find stocks whose price differs from their fundamental value.
 - c. stock prices do not follow a random walk.
 - d. All of the above are correct.

13. Which group within the Federal Reserve System meets to discuss changes in the economy and determine monetary policy?
 - a. the Board of Governors
 - b. the FOMC
 - c. the regional Federal Reserve Bank presidents
 - d. the Central Bank Policy Commission

14. Which of the following entities actually executes open-market operations?
 - a. the Board of Governors
 - b. the New York Federal Reserve Bank
 - c. the Federal Open Market Committee
 - d. the Open Market Committees of the regional Federal Reserve Banks

15. Suppose that banks desire to hold no excess reserves, the reserve requirement is 5 percent, and a bank receives a new deposit of \$1,000. This bank
 - a. will increase its required reserves by \$50.
 - b. will initially see its total reserves increase by \$1,000.
 - c. will be able to make a new loan of \$950.
 - d. All of the above are correct.

Sample Exam 2 -- Solutions

Part 1: Terms, Numeric Solutions, and Short Answer

1. The figure below illustrates one common way of thinking about the behavior of aggregate output over time.
 - a. *Peak*
 - b. *Trough*
 - c. *Expansion*
 - d. *Recession*
 - e. *Negative output gap*
 - f. *Positive output gap*
 - g. *rise, fall*

2. Aggregate income accounting.
 - a. What are the four broad categories or components of GDP in the expenditure approach to national income accounting?
Consumption, Investment, Government Expenditures, Net Exports (C, I, G, X)

 - b. Which of these four categories is historically the most stable in terms of quarterly rates of change?
Consumption

 - c. Which of these four categories is historically the most volatile in terms of quarterly rates of change?
Investment

Use the following data related to population, aggregate output and prices for questions #3 and #4:

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GDP Price Deflator	104.188	106.304	109.098

3. Nominal and real GDP.
 - a. What was the growth rate of nominal GDP between 2002 and 2003? *4.8%*
 - b. What was the value of real GDP in 2002? *10,048.76*
 - c. What was the growth rate of real GDP between 2002 and 2003? *2.7%*

4. Per capita GDP.
 - a. What was the value of per capita real GDP in 2002? *35,258*
 - b. What was the growth rate of per capita real GDP between 2002 and 2003? *1.6%*
 - c. If, in a given year, nominal GDP increased by 6%, prices rose by 4%, the population grew by 1%, would the standard of living be improved or diminished? *As measured by changes in per capita real GDP, it would have improved by 1%.*

5. If real GDP grows by 3% per year while the population grows by 1% per year ...
 - a. How long will it take for a country's aggregate output to double? $23 \frac{1}{3}$ years (use "rule of 70")
 - b. How long will it take for a country's standard of living (per capita real GDP) to double? *35 years*
6. In January 1994, the Bureau of Labor Statistics reported that during 1993 the Civilian Non-institutional population of the U.S. was 193,550,000, the Labor Force Participation Rate was 66.2%, and that 119,389,000 people were employed. Based on this information, what was the U.S. unemployment rate in 1993? *6.82%*
7. Consider the balance sheets below for Terre Incognita National Bank:
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 - c. If the purchase of bonds in part B is the only such purchase in the banking system, what is the maximum amount of new loans that could be generated *by the entire banking system?* *1,000*

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ASSETS		LIABILITIES		ASSETS		LIABILITIES	
Bonds	200	Deposits	1,000	Bonds	100	Deposits	1,000
Loans	700			Loans	800		
Required Reserves	100			Required Reserves	100		
Excess Reserves	0			Excess Reserves	0		

8. What are three different policy actions that the Federal Reserve could take to decrease the money supply and raise interest rates?

Sell bonds (open market transactions), raise the discount rate, raise the reserve requirement.

Part 2: Multiple Choice

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4. Government policies to encourage saving are meant to:
 - a. Promote economic growth in the long run by fostering new investment.

5. Stock represents
 - d. All of the above are correct
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 - d. no tax exemptions and long terms.
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 - b. the FOMC
14. Which of the following entities actually executes open-market operations?
 - b. the New York Federal Reserve Bank
15. Suppose that banks desire to hold no excess reserves, the reserve requirement is 5 percent, and a bank receives a new deposit of \$1,000. This bank
 - d. All of the above are correct.