

Examination #1

1.

Assume the following:

	Price in Base Year	Quantity in Base Year	Price in Current Year	Quantity in Current Year
A	\$2	40	\$30	100
B	\$1	65	\$15	50
C	\$5	74	\$75	200

The **Nominal GDP** for the Current Year is \$_____. (3 points)

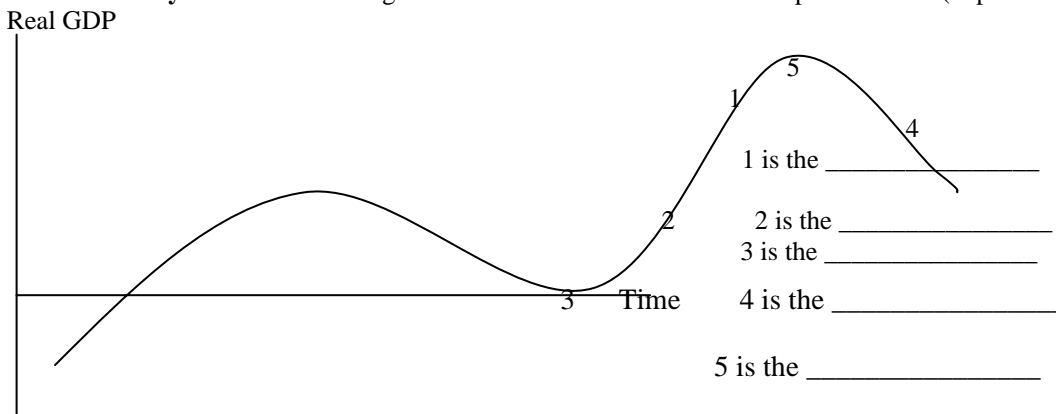
The **Real GDP** is \$_____. (3 points)

The **GDP Deflator** is _____. (2 points)

Show All Calculations.

2. From the early 1970s until the middle 1990s, economic growth in the United States was unusually slow. Productivity in the American economy grew slowly compared to the past and also compared to other countries. **Name at least four effects this slow economic growth had on American life.**
(5 points)

3. The **business cycle** shows the change in Real GDP over time. Label each phase below. (1 point each)



4. State whether the following people would be considered **employed, unemployed, or not in the labor force** (1 point each):

- Last week, Jose spent most of his time looking for a job. However, he did work one day at Denny’s for which he earned \$75. _____
- Bryan lost his job at Gateway six months ago. He has not worked since .He has been looking for a similar job. Last week, he went to his first job interview. _____

5. The Labor Department recently announced that the unemployment rate was 6.0%. Write a brief description of the way by which the Labor Department arrived at that calculation. (2 points)

For what reasons might this official unemployment rate of 6.0% be an **understatement** of the actual amount of unemployment? (2 points)

For what reason might this official unemployment rate if 6.0% be an **overstatement** of the actual amount of unemployment? (1 point)

6. State one of the definitions of “full employment” (or the “natural rate of unemployment”)?
(2 points)

7. For each of the following unemployed people, state whether their unemployment is **frictional, seasonal, cyclical, or structural** (2 points each)

I have a job here at Palomar College. But I am unemployed in the months of June and July. My job begins again in August when school starts. During these two months, I am _____ unemployed.

- Mary gave up her job at Computer City when she decided to enter Palomar College. She looked for a job for two weeks before finding one that fit her new schedule. During these two weeks, she was _____ unemployed.
 - Jose worked in the airline industry. When the recession came, there were fewer people flying. As a result, Jose was laid-off. During the time he was laid-off, he was _____ unemployed.
8. Explain first how the CPI is calculated. Then explain how the GDP Deflator is calculated. Finally, explain why the **GDP Deflator** is considered a better measure of inflation than **the CPI**. (5 points)
9. If the nominal interest rate on a savings account is 3% at a time that the inflation rate is 1%, what is **the real interest rate**? SHOW ALL CALCULATIONS. (1 point)

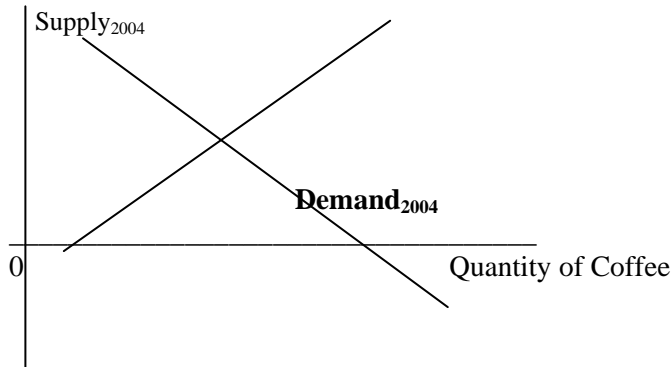
10. Name three reasons inflation causes Real GDP (production) to grow slower than it otherwise would. (6 points – 2 points each)

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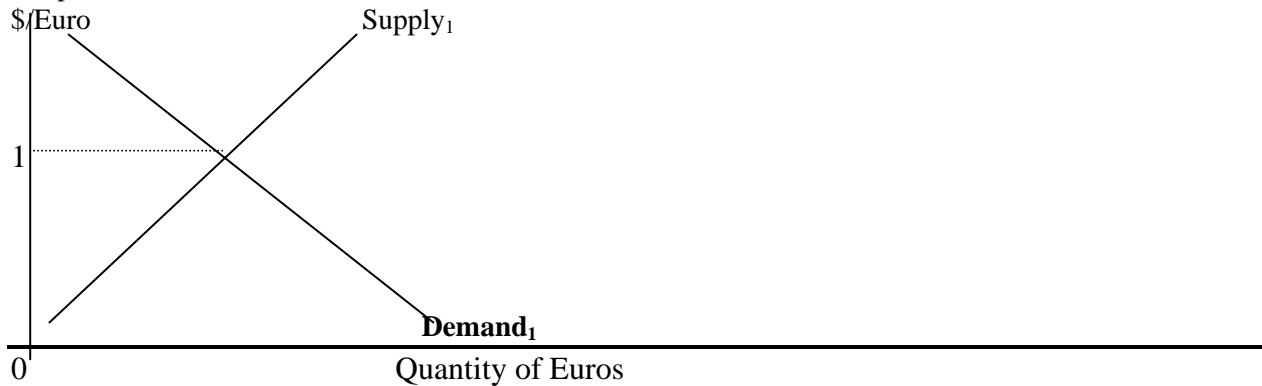
11. Suppose that the government is undertaking policies that you believe will cause there to be significant inflation next year. In each of the following cases, state whether you would favor or oppose the government policies that would cause inflation. Briefly state why. (2 points each)
- You owe a large amount on your credit card. You would _____ (favor or oppose?) because _____
 - You are a wage earner with no COLA. You would _____ (favor or oppose?) because _____
 - You have \$100,000 in your retirement savings plan at the bank. You would _____ (favor or oppose?) because _____

12. The graph below reflects the market for coffee. The demand for coffee and the supply of coffee as of 2004 are shown, as are the equilibrium price and quantity. First, assume that buyers learn that drinking coffee can reduce the risk of getting diabetes. Second, assume that, in 2005, the price of water used to grow coffee beans rises greatly. Make the appropriate **TWO changes** on the graph for coffee and then show the new equilibrium price and quantity of coffee. **Explain why you made the changes that you did**. Also, **state what will happen** (if it can be determined) to the price and quantity of coffee. Label carefully. (5 points)

Price

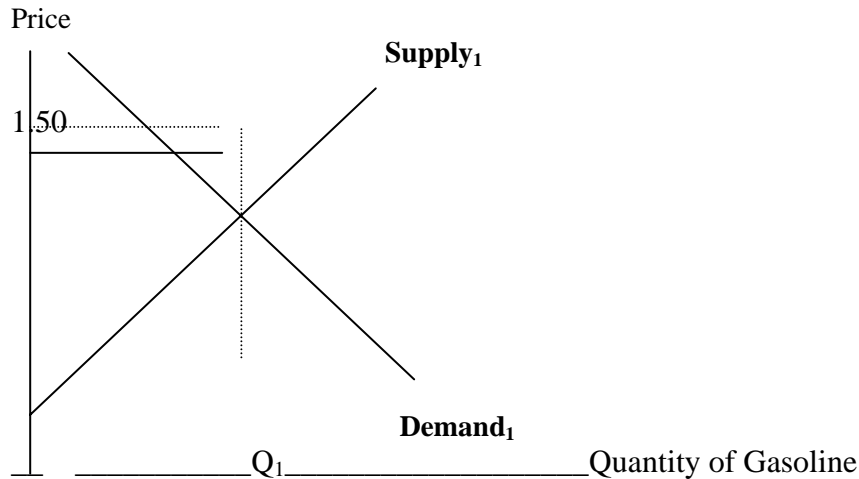


13. The graph below shows the situation in **the foreign exchange market** for the Euro. The exchange rate is \$1 = 1 Euro. Then, the following two events occurs: (1) **there is an expansion in the United States which increased the demand by Americans for imports from Europe.** (2) Because of the large projected budget deficits in the United States, Europeans come to have less confidence in the United States. Portfolio investment by Europeans into the United States is reduced. Show the results of these two events on the graph. Label carefully, showing the new equilibrium exchange rate. **Explain why** you made the change or changes that you did. **Which money depreciates and which money appreciates?** (10 points)



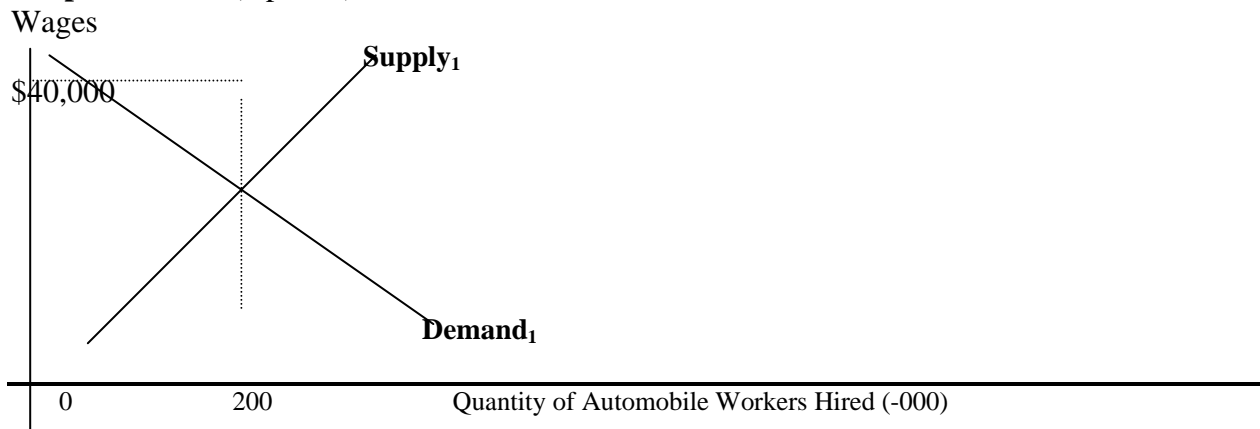
14. If the American dollar **depreciates**, American exports will _____ (rise or fall?) and American imports will _____ (rise or fall?). In each case, **explain why**. (2 points)
15. The following terms relate to the material on corporations and the stock market (Chapter 7). Choose **THREE ONLY** of these terms: (2 points each)
1. What is the difference between a **partnership** and a **corporation**?
 2. What is the difference between a **Treasury bill**, a **Treasury note**, and a **Treasury bond**? (In your answer, be sure to explain who the "Treasury" is.)
 3. What is a **Mutual Fund**?
 4. Define Dividend; Retained Earnings; Capital Gain.
 5. You buy a corporate bond for \$1,000. The bond pays 5% interest per year for 20 years. A week later, you sell the corporate bond for \$950. The actual **interest rate** on the corporate bond has (risen, fallen, or stayed the same?) _____ because _____
 6. Define "**liquidity**". Which is more liquid --- a savings account or a one year CD? Why?

16. Assume the following. (1) There is a reduction in the amount of gasoline produced because several refineries have to shut-down to fix problems. (2) Fearing a shortage, gasoline buyers decide to stock up on gasoline. They buy large gasoline tanks and try to fill them. (3) Government regulators do not allow the price of gasoline to rise at all. Show the results of these three events on the graph below. Then, in the space to the side, state what will occur, **especially the decision to not allow the companies to raise their prices**. Hint: this is a **price ceiling**. (10 points)



17. The graph below shows the market for the labor of automobile workers. The demand for labor, the supply of labor, and the equilibrium wage are shown.

In 2004, there is a recession, **decreasing the demand for new automobiles**. In addition, because of a strong labor union, **wages are not flexible downward**. Show the change on the graph and explain what will result, given these two facts, especially the strong union. Hint: **this is a price floor**. (4 points)



18. Briefly define **SIX ONLY** of the following terms. **Do not do more than six**. (2 points each)

1. Business Investment Spending
2. Portfolio Investment
3. **Intermediate Good**
4. **Potential Real Gross Domestic Product (GDP)**

5. **Productivity**6. **Cost of Living Adjustment (COLA)**7. **Net Exports**8. **Equilibrium**9. **Hyperinflation**

Economics 101

Answers to Examination #1

Fall 2003

1. Nominal GDP = $(100)(\$30) + (50)(\$15) + (200)(\$75) = \$18,750$
 Real GDP = $(100)(\$2) + (50)(\$1) + (200)(\$2) = \$1,250$
 GDP Deflator = $\$18,750$ divided by $\$1,250 = 15$ times $100 = 1,500$
2. Some points that should be mentioned include the slow growth in the standard of living. This has led to more family members having to work, to greater debt and less savings, to later marriage and fewer children, and perhaps to a tax revolt. The slow growth compared to other countries has also contributed to the trade deficits.
3. 1. Peak 2. Recession 3. Trough 4. Recovery 5. Expansion
4. Jose is employed. Bryan is unemployed.
5. They sampled about 60,000 households. The rate was calculated as those unemployed as a percent of the labor force. The labor force included those employed and unemployed. One is employed if one worked in the previous week for pay. One is unemployed if one did not work but did actively seek a job. The rate is understated because of discouraged workers and those working part-time involuntarily. It is overstated because of those in the underground economy.
6. Full employment is the unemployment rate that results when all unemployed people are Frictional or Seasonal or Structural. It means that there is a vacant job available for every job seeker. It is the lowest rate possible before inflation will begin to accelerate.
7. Seasonal; frictional; cyclical
8. The CPI is calculated by dividing the cost today of a market basket of goods and services by the cost in 1982-84 of the same market basket. The GDP Deflator is calculated as the Nominal GDP divided by the Real GDP. The GDP Deflator is a better measure of inflation because it considers the prices of all goods and services included in GDP. The CPI is limited to certain consumer items bought by urban, middle-class consumers.
9. $3\% - 1\% = 2\%$
10. Inflation reduces savings plus mis-channels it into areas that will not lead to increased investment spending. Inflation encourages debt. Inflation reduces investment spending by increasing uncertainty.
11. **Credit Cards.** You would support because inflation reduces the value of the debt you owe.
 Wage earner with no COLA would oppose because inflation would reduce the value of the wages earned.
 Savings account. You would oppose because inflation would reduce the value of your account.
12. Because of the change in tastes, the demand for coffee would rise (shift to the right). Because of the higher price for water, the supply of coffee would fall (shift to the left). Both changes have the same effect on the price of coffee --- it rises. But the two changes have opposite effects on the quantity. Therefore, the change in the quantity cannot be determined.
13. This case would be seen as an increase in demand for Euros and a decrease in the supply of Euros due to the decreased desire to buy American dollars. The demand for Euros shifts right and the supply of Euros shifts left. The result is that the price of the Euro rises. The dollar depreciates and the Euro appreciates.
14. rise because dollars are less expensive for foreigners; fall because foreign money is more expensive for Americans
15. Corporation: a separate legal person with limited liability. Partnership: a group of owners with unlimited liability

Treasury Bill: a short-term (one year or less) IOU of the United States government Treasury Note: IOU of the U.S. government due in more than 1 year but less than 10 years; Treasury Bond: IOU of the U.S. government due in 10 years or more

Mutual Fund: pools the savings of large numbers of people and invests them

Dividend: part of the profits of a company distributed as money to the owners; retained earnings: the part of the profits of the company not distributed to the owners; capital gain: a gain due to the increase in the price of the stock

Risen because the buyer will get the same number of dollars (\$50) but has paid only \$950 to get these.

Liquidity: easily turned into money without loss. A savings account is more liquid as it can be turned into money easily. For the one year CD, one must wait a year to turn it into money or pay a penalty.

16. The supply of gasoline would fall (shift left). The demand for gasoline would rise (shift right). Ordinarily, the price would rise. If the sellers cannot raise prices, there is a price ceiling. There will be shortages (long lines). Gasoline will be rationed --- first-come, first-served, government choice, etc. There could be a gray market here (charging for other goods) or a black market.
 17. The decrease in the demand for new automobiles creates a decrease in the demand for automobile workers (shift left). There is no shift in the supply of automobile workers. If the wages cannot fall, there will be a surplus of automobile workers. This is the case of a price floor. There will be unemployed automobile workers – cyclical unemployment.
1. **Businesses buying new capital goods.** 2. **Lending to someone in another country**
 3. A good used in the production of another good, such as iron produced to be used to make steel
 4. The amount of production necessary to have full employment (i.e., the natural rate of unemployment)
 5. Real Gross Domestic product (GDP) per hour worked
 6. An adjustment to one's income by the amount the CPI changes
 7. The difference between exports and imports
 8. A balance between demand and supply so that there is no tendency for either the price or the quantity bought and sold to change.
 9. Very fast rise in prices—usually inflation rates of over 200% per year

Economics 101
Spring 2004
Examination #2

Name _____

Total Score _____

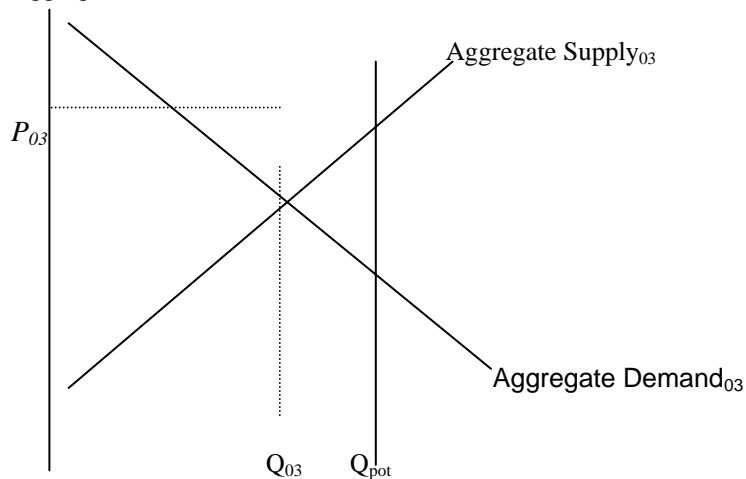
1. In the graph below, the aggregate demand and aggregate supply curves are drawn, showing the macroeconomic equilibrium for the United States as of 2003. Potential Real GDP (Q_{pot}) is drawn showing a **recessionary gap**.

Then, in the year 2004, the following events occur: (1) there is a decrease in taxes both on individuals and on businesses; (2) the Federal Reserve decreases the money supply, causing interest rates to increase; (3) there is an increase in government spending on Defense and Homeland Security; (4) there is a depreciation of the American dollar (this affects both Aggregate Demand and Aggregate Supply), (5) there is an oil prices as OPEC reduces the supply of oil and (6). Consumers and businesses become more pessimistic about the future of the American economy.

Draw the new curves that would result (draw a new curve to indicate each of the events). In the space below the graph, explain why you made these changes. What would result from these actions (consider the aggregate price level, Real GDP, and employment)?

(20 points for the entire question)

Aggregate Price Level

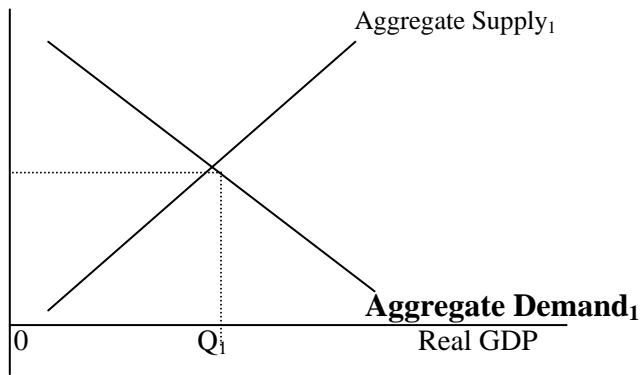


2. What is **Say's Law**? (2 points)

According to Classical Economics, an economy will adjust automatically to eliminate a **recessionary gap**. Explain the **three changes** that need to occur for this automatic elimination of the recessionary gap to occur. On the graph below, show the result of the three changes. (5 points)

GDP Deflator





3. What is the **equation of exchange**? Name and define each of the variables. (3 points)
 What are the **two assumptions** that were made by the classical economists to convert the equation of exchange into the **quantity theory of money**? (2 points)
 What is the **conclusion** of the quantity theory of money? (2 points)
4. Assume the Britain and the United States are both on the **Gold Standard**. The exchange rate is \$5 equals one British pound. Now assume the inflation occurs in Britain but not in the United States. Explain fully what will result. (5 points)
5. According to **Keynes**, an economy may **NOT** be able to eliminate a recessionary gap automatically. What were his arguments as to why this automatic elimination of recessionary gaps would **NOT occur**? (5 points)
6. I earned wages of \$200,000. In addition, I received \$10,000 in government transfers. However, I paid \$40,000 in taxes to the government. My **Disposable Income** is \$_____. (2 points)
7. When my income was \$10,000, I spent \$10,000 on consumption. When my income rose to \$20,000, my spending on consumption rose to \$19,000.
 At the income of \$10,000, what is my **average propensity to consume**? _____ (2 points)
 What is my **marginal propensity to consume**? _____ (3 points)

SHOW CALCULATIONS.

8. <u>Real GDP (Income)</u>	<u>Consumption</u>	<u>Investment</u>	<u>Government Purchases</u>	<u>Exports</u>	<u>Imports</u>
\$ 1,000	\$ 900	\$400	\$400	\$1000	\$1000
2,000	1,800	400	400	1000	1000
3,000	2,700	400	400	1000	1000
4,000	3,600	400	400	1000	1000
5,000	4,500	400	400	1000	1000
6,000	5,400	400	400	1000	1000
7,000	6,300	400	400	1000	1000
8,000	7,200	400	400	1000	1000
9,000	8,100	400	400	1000	1000

Using these numbers, the **marginal propensity to consume** is _____ (2 points)

Using these numbers, the **Equilibrium Real GDP** (income) is _____ (3 points).

At a level of Real GDP (income) equal to \$5,000, Aggregate Demand is _____ (greater than, less than, equal to?) Real GDP (income). (1 point)

This causes Real GDP to _____ (rise, fall, stay the same?). (1 point)

Assume that **Potential Real GDP** is equal to \$9,000. There is a/an (inflationary or recessionary?) _____ **gap** equal to \$_____. (2 points)

9. Using the numbers in question 8, assume that, for some reason, business investment spending **rises**

by \$600 (from \$400 to \$1,000) What will the new Equilibrium Real GDP be? **Show only by using the multiplier formula.** At this level of Real GDP, there would be a/an _____ (inflationary or recessionary?) **gap** equal to \$_____. (7 points)

10. Define the following terms:

A. Permanent Income

B. Transitory Income

Then, use the **permanent income theory of consumption** to explain the results of a proposal for a one-year-only tax reduction to try to stimulate the economy. (5 points for the whole question)

11. Briefly describe the life cycle theory of consumption.

Then, use this theory to explain the results of having the baby boomers get into the retirement years while the baby bust generation becomes middle aged (age 40 to 60). (5 points for the whole question)

12. For each of the following, state whether consumption will increase, decrease, or stay the same: (1 point each)

1. consumer debt is 5% of disposable income _____

2. stock market prices rise _____

3. real interest rates fall _____

4. income is taken from the middle class and given to the poor _____

5. people expect higher inflation soon _____

6. The GDP Deflator rises _____

13. In the class and in the text, it was shown that many different factors affect **net investment spending**. Net investment spending as a percent of GDP was low for most of the past twenty years before it rose from 1995 to 2000.

Define “net investment” and state why it is important to increase it.

Then, state what needs to occur to cause net investment spending to increase. Name as many factors as you can that will cause it to increase.

- 1.
- 2.
- 3.
- 4.
- 5.

Others Factors:

Which of these factors can be influenced by the government (that is, by the President and the Congress)? (10 points for the whole question)

The largest federal government **purchase** is for _____ and the largest federal government **transfer** is for _____. (2 points)

15. What does the **Office of Management and Budget (OMB)** do? (1 point)

16. For the federal government, the **fiscal year** begins on _____ (1 point)

17. What **problems** is the United States likely to face regarding **Social Security and Medicare** in the future? **Why** are these problems likely to arise? (3 points)

1. Draw the Equilibrium Real GDP to the left of the vertical Potential Real GDP. The decrease in taxes would shift aggregate demand to the right and might also shift aggregate supply to the right. The decrease in the money supply would shift aggregate demand to the left. The increase in government spending would shift aggregate demand to the right. The depreciation of the dollar would shift Aggregate Demand to the right (by increasing exports and decreasing imports) and shift Aggregate Supply to the right (by decreasing costs of production). The increase in oil costs would shift Aggregate Supply to the left. The pessimism would shift Aggregate Demand to the left. The effect on Real GDP and on prices cannot be determined unless one knows which shifts are greater.
2. Say's Law is that supply creates its own demand. If it can be produced, someone will buy it. If there is a recessionary gap, prices would fall, real interest rates would fall causing consumption and investment to rise (shift AD to the right), and wages would fall lowering costs (shift AS to the right) until equilibrium occurred at the potential real GDP.
3. $MV = PQ$ M= money supply V = velocity (the number of times the average dollar is spent in a year) P = price level Q = Real GDP Q is constant at Potential Real GDP; V is constant An increase in M causes only inflation!
4. Inflation in Britain would increase the demand for dollars (supply of pounds) and decrease the demand for pounds. The pound would depreciate. This would create an opportunity for someone to profit by buying gold in Britain, shipping it to the U.S., swelling it for dollars, and then selling the dollars for pounds. This would act to keep the exchange rate fixed. Gold leaving Britain would reduce the money supply there, reducing inflation. Gold entering the U.S. would increase the money supply, causing higher inflation in the U.S.
5. Keynes argued that the recessionary gap would not end automatically, and might even worsen. Real interest rates would fall, but consumption and investment would not rise due to pessimistic expectations. Some prices and most wages would not fall.
6. $\$200,000 + \$10,000 - \$40,000 = \$170,000$
7. $\$10,000$ divided by $\$10,000 = 1$. $\$9,000$ divided by $\$10,000 = .9$
8. Marginal Propensity to Consume = $9/10$. Equilibrium where $Real\ GDP = C+I+G+E-M$ --- $\$7,200 + 400 + 400 + 1000 - 1000 = \$8,000$ Greater than (AD = $\$5,300$); Rise Recessionary Gap of $\$1,000$ ($\$8,000 - \$9,000$)
9. The increase in spending is $\$6,000$. $\$600$ times the multiplier (10) is equal to $\$6,000$. $1/1-.9 = 10$. Starting from $\$8,000$, aggregate demand rises by $\$6,000$ to $\$14,000$. There is now an inflationary gap of $\$5,000$.
10. Consumption depends on permanent (expected) income and very little on transitory (one-time-only) income. The one time only tax reduction is transitory income, most of which will affect savings
11. Consumption depends on disposable income expected over one's lifetime. As the baby boomers retire, there will be more people in the spending years. As the baby bust generation hits middle age, there will be fewer people in the saving years. Spending will rise and savings will be lower.
12. increase; increase; increase; increase; decrease; decrease
13. Net investment is gross investment minus depreciation. It increases Potential Real GDP by increasing productivity. Some causes you might mention include: lower real interest rates*; lower costs of capital goods; higher corporate profits; lower corporate profits taxes*; higher expected sales and capacity utilization; lower costs of labor or of natural resources; less general uncertainty caused by inflation*. The starred item can be affected by government.
14. defense; Social Security
15. prepares the budget for the president of the United States
16. October 1
17. As the population ages, both Social Security and Medicare will have greater expenditures than revenues. The surplus will accumulate until a certain year. Then, the surplus will diminish. When the surplus is reduced to zero, the system is broke. See the section in the text for other points to be included.

Economics 101
Spring 2004

Name _____
Total Score _____

Examination #3

1. The largest tax collected at the federal level is the _____ tax and the largest tax collected at the state level is the _____ tax. (2 points)
2. When my income was \$100,000, I paid \$20,000 in tax. When my income rose to \$200,000, I paid \$60,000 in tax.

When my income was \$100,000, my **average tax rate** was _____. (1 point)

When my income was \$200,000, my **average tax rate** was _____. (1 point)

My **marginal tax rate** was _____ (2 points)

The tax described above is _____ (**progressive, regressive, or proportional?**)

because _____ (2 points)

3. Explain why the state **sales tax** is considered to be **regressive**: (2 points)

Explain why the **social security tax** is considered to be **regressive**: (2 points)

4. Assume that Equilibrium Real GDP is \$219,000. Potential Real GDP is \$300,000. The marginal propensity to consume is 9/10.

To close all gaps, **government purchases** should _____ (increase or decrease?) by \$ _____. (3 points)

To close all gaps, **taxes** should _____ (increase or decrease?) by \$ _____. (3 points)

To close all gaps, **transfers** should _____ (increase or decrease?) by \$ _____. (2 points)

SHOW ALL CALCULATIONS. These are three separate questions.

5. Define the term "**automatic stabilizer**". (1 point)

Then, for each of the following, state whether it **is or is not** an automatic stabilizer. Explain **why or why not**. (2 points each – 1 for the correct answer and 1 for the explanation)

1. spending on unemployment benefits

2. spending for homeland security

Page 2

6. In FY 2004, assume that the official budget deficit is \$500 billion. The actual unemployment rate is 6%. The natural rate of unemployment (full-employment) is 4%. What is the **structural budget deficit**? **Show calculations**. (3 points)

In FY2005, assume that the official budget deficit is \$480 billion, the unemployment rate is 5%, and the natural rate of unemployment (full employment) is 4%. Between 2004 and 2005, is fiscal policy **expansionary or contractionary**? Explain **why**. (3 points)

7. If the federal government has a budget deficit of \$500 billion, where does it get this money? _____ . As a result of this, **interest rates** will _____ (rise or fall?). **Consumer spending** will _____ and **business investment spending** will _____ (rise or fall?). This phenomenon is known as _____ (3 points)
8. If the federal government has a budget deficit of \$500 billion, **interest rates** will _____ (rise or fall?). As a result, the American dollar will _____ (appreciate or depreciate). American exports will _____ and American imports will _____, causing the American **trade deficit** to _____ (increase, decrease, or stay the same?). (2 points)
9. Define “**national debt**”. In your answer, be sure to distinguish between the **national debt and the budget deficit**. Also distinguish between the **gross national debt** and the **net national debt**. (3 points)
10. “The **national debt** is simply passing a burden on to our children and grandchildren.” Is this statement true or false? **Explain why**. (2 points)
11. Today, President Bush argues that lowering marginal tax rates will increase aggregate **supply** (overall production). This is called “supply-side economics”. **Explain what effects the reduction of the marginal tax rates might have that would act to increase aggregate supply?** (That is, explain the argument of supply side economics)

If indeed aggregate supply were increased, what would happen to **Real GDP** (production)? What would happen to the **unemployment rate**? What would happen to the **GDP Deflator** (the price level)? (5 points for the whole question)

12. In the graph space, draw **the Laffer Curve**. **Label** both axes. On the side, write a **short explanation** of what the Laffer Curve demonstrates. (3 points)



13. Name the **three functions** of money. What does each mean? (2 points each – 1 for the name and 1 for the explanation)

- 1.
- 2.
- 3.

14. Name **two** components of **M - 1** and **explain what each represents**: (2 points each --- 1 for the name and one for the explanation)

- 1.
- 2.

15. Name **one additional** component of **M – 2** that is not part of M-1: (1 point)

16. Briefly describe the **structure of the Federal Reserve System (Fed)**. In your answer, what is the **definition of a central bank**? (2 points)

What is the **role** of the **Board of Governors**? How is one **selected to it**? (2 points)

What is the **role** of the **Chair**? How does **one become Chair**? (2 points)

What is the **role** of the **FOMC**? **Who is on the FOMC**? (2 points)

17. Assume that the Fed increases the **monetary base** by \$100 billion. The reserve requirement is 1/6 (16.66%). There are no excess reserves at the time this increase is done. By how much will the money supply rise? **SHOW ALL CALCULATIONS**. (4 points)

Page 4

18. If the people chooses to hold less in currency and more in checkable deposits, the money supply will _____ (rise, fall, or stay the same?) because _____

_____ (2 points)

19. If the Fed wished to conduct an **expansionary monetary policy**, it has three tools to accomplish this. **Name each** of the tools and **explain why** each would be expansionary. (3 points each -- 1 for the name and 2 for the explanation)

1.

2.

3.

20. Define “**demand for money**”. (1 point)

In each case, state whether **the demand for money** will rise, fall, or remain unchanged (1 point each)

1. Real GDP falls _____

2. the GDP Deflator falls _____

3. real interest rates fall _____

4. people expect lower inflation _____

21. If the **demand for money** is rising, **velocity** must be _____
(answer “rising”; “falling”; or “remaining unchanged”) (1 point)

22. The “**transmission mechanism**” means the way by which an increase in the money supply causes aggregate demand to rise. Explain the transmission mechanism. That is, **explain why an increase in the money supply will cause aggregate demand (total spending) to increase**. (3 points)

23. Define **four only** of the following terms. If you answer more than eight, only the first eight will be graded. (2 points each)

1. Indexation

2. Liquidity

3. Reserves

4. Federal Funds

5. Treasury Bill

6. Monetary Base

7. Prime Rate

8. FDIC (what does it do?)

Economics 101 Answers to Examination #3 Spring 2004

1. federal income tax; sales tax
2. 20%; 30%; 40%: progressive because the average tax rate rises
3. The sales tax is regressive because with higher incomes, people can afford to save more
The social security tax is regressive because of the upper income limit (\$87,900)
4. There is a recessionary gap of \$81,000. Increase government purchases by \$8,100 (times 10 = 81,000) $1/1-9/10 = 10$. Decrease taxes by \$9,000 (times 9 = 81,000) $9/10$ divided by $1-9/10 = 9$. Increase transfers by \$9,000 – the same as taxes.
5. Automatic stabilizers increase aggregate demand during recessions and decrease it during expansions without changes in legislation. Unemployment benefits are entitlements that increase automatically during recessions and contract automatically during expansions. Homeland Security spending does not change as a result of a recession and therefore is not an automatic stabilizer.
6. The structural budget deficit is the amount of deficit or surplus that would exist if there were the natural rate of unemployment. It takes out the part of the deficit resulting from economic changes. Each point of unemployment raises the deficit \$30 billion. \$500 billion minus \$60 billion (2 times \$30 billion) is equal to \$440 billion. \$480 billion minus \$30 billion (1 times \$30 billion) = a structural deficit of \$450 billion. Since the structural deficit went from \$440 billion to \$450 billion, fiscal policy was expansionary.
7. As the government spends more, it borrows more. More borrowing raises interest rates which reduces consumption and business investment spending. Consumer spending and business investment spending are crowded-out by the government. The phenomenon is called crowding-out.
8. The higher interest rates also appreciate the American dollar. An appreciation of the dollar reduces American exports and increases American imports, increasing the trade deficit.
9. The national debt is the total debt of the Treasury Department of the American government. The budget deficit is this year's addition to the national debt. The net national debt subtracts out the part of the national debt that is owed to other government agencies.
10. The burden is incurred when the deficit (this year's addition to the debt) is incurred. This is the crowding-out. In future generations, there will be debt; however, they will owe each other.
11. Lowering the marginal tax rates is supposed to increase work hours, increase savings, and allow people to make more productive decisions. The increase in production would raise incomes, lower the unemployment rate, and lower the price level.
12. The Laffer Curve graphs tax rates against tax revenues. It argued that increasing marginal tax rates would act to reduce overall tax revenues by reducing production (and incomes). See the graph.
13. Money is a medium of exchange (something used in exchange for goods and services), a store of value (one way of holding wealth), and a unit of account (a unit of measurement of value).
14. currency (IOU of the Fed) and checkable deposits (IOU of a financial institution)
15. savings deposit; money market fund, small time deposit, or money market deposit account
16. A central bank is a bank for banks. There are 12 banks, each with its own board and President. There is a 7 person Board of Governors to run the system, appointed by the President for a 14-year term. One serves as Chair --- for a 4-year term. The Chair acts as the leader. The FOMC is composed on the 7 Governors and 5 of the 12 Presidents and makes monetary policy.
17. \$100 billion times 6 = \$600 billion (1 divided by $1/6 = 6$)
18. Rises because the banks will have more reserves and therefore can make new loans
19. lower the reserve requirement which increases excess reserves and increases the money multiplier
lower the discount rate encouraging the banks to borrow --- The Fed will create more reserves
to lend to the banks (rate charged by the Fed to a commercial bank)
buy Treasury securities on the open market; More money to pay for the securities means
20. The quantity of money people choose to hold as part of wealth. fall; fall; rise; rise 21. Falling
22. The Fed increases the money supply. As a result, interest rates fall. Consumer spending and business investment spending rise, increasing aggregate demand (total spending) via the multiplier process.
23. Indexation: adjust the tax brackets for inflation. Liquidity: how easily something can be converted into money without loss. Reserves: IOUs of the Fed to a commercial bank. Federal Funds: Ious of one commerical bank to another. Treasury Bill: an IOU of the government due in one year or less. Monetary Base: currency plus reserves (IOUs of the Federal reserve); Prime Rate: interest rate charged by a commercial bank to the least risky borrower; FDIC: insures the accounts at commercial banks against bank failure.