Final Exam

ECON 010, Fall 2012

12/19/12

NAME:_____

RI's NAME:_____

Recitation Section/ Time:_____

INSTRUCTIONS

- Please put your name on all pages.

- There are 4 parts.

- There are 100 total points. Plan your time accordingly.

- Read all questions carefully.

- No calculators or notes allowed.

- Write legibly and label any diagrams appropriately and thoroughly.

- This quiz is given under the terms of Penn's Code of Academic Integrity.

My signature below certifies that I have complied with the University of Pennsylvania's Code of Academic Integrity in completing this examination.

_____
Name (Printed)

_____   _____
Signature   Date

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Part 1: Multiple Choice (30 points, 2 points each)
No partial credit.

Please circle the correct answer for each of the following questions:

1. Which of the following sequence of events follows a contractionary fiscal policy?

A) $AE\uparrow \to Y\uparrow \to Md\downarrow \to r\downarrow \to I\downarrow \to AE\downarrow$.
B) $AE\uparrow \to Y\uparrow \to Md\uparrow \to r\uparrow \to I\downarrow \to AE\downarrow$.
C) $AE\downarrow \to Y\downarrow \to Md\downarrow \to r\downarrow \to I\uparrow \to AE\uparrow$.
D) $AE\downarrow \to Y\downarrow \to Md\downarrow \to r\downarrow \to I\downarrow \to AE\downarrow$.

2. If the SRAS curve shifts from year to year and the AD curve does not, then the Phillips curve must be:

A) downward sloping.
B) upward sloping.
C) shifting to the left.
D) shifting to the right.

3. The required reserve ratio is 20%. If the Fed sells $5 million worth of government securities to the public, the change in the money supply will be:

A) -$20 million.
B) -$25 million.
C) $25 million.
D) $20 million.

4. The term business cycle refers to the:

A) short-term ups and downs in the value of the dollar.
B) long-term trends in the price level.
C) short-term ups and downs in the level of economic activity.
D) long-term trends in the level of economic activity.

5. The demand for refrigerators falls when the economy enters a downturn. If a refrigerator manufacturer lays off workers during an economic downturn, this would be an example of:

A) frictional unemployment.
B) natural unemployment.
C) structural unemployment.
D) cyclical unemployment.

6. The Bureau of Labor Statistics reported the following data for 2008:

Labor force: 150 million
Employment: 135 million
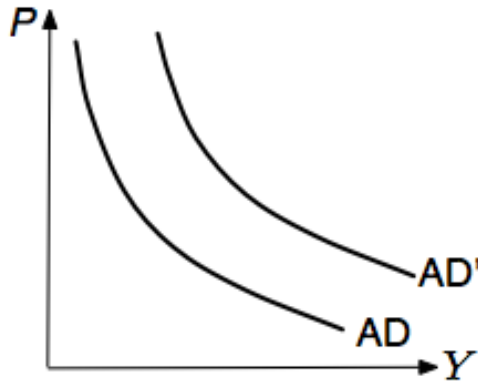Working-age population: 200 million

What is the unemployment rate?

A) 33.3%
B) 25%
C) 10%
D) 5%

7. Which of the following factors is NOT believed to affect output in the long run?

A) Monetary policy
B) The size of the labor force
C) The capital stock
D) Technology

8. Refer to the following figure.

An aggregate demand shift from AD to AD' can be caused by:

A) an increase in the price level.
B) a decrease in the price level.
C) a decrease in money supply.
D) a decrease in taxes.

9. The GDP of the U.S. in 2002 was around $10 trillion. This means:

A) that the value of output in 2002 was around $10 trillion.
B) that total income in 2002 was around $10 trillion.
C) that total spending in 2002 was around $10 trillion.
D) All of the above.

10. Refer to the following short-run and long-run Phillips curves graph.
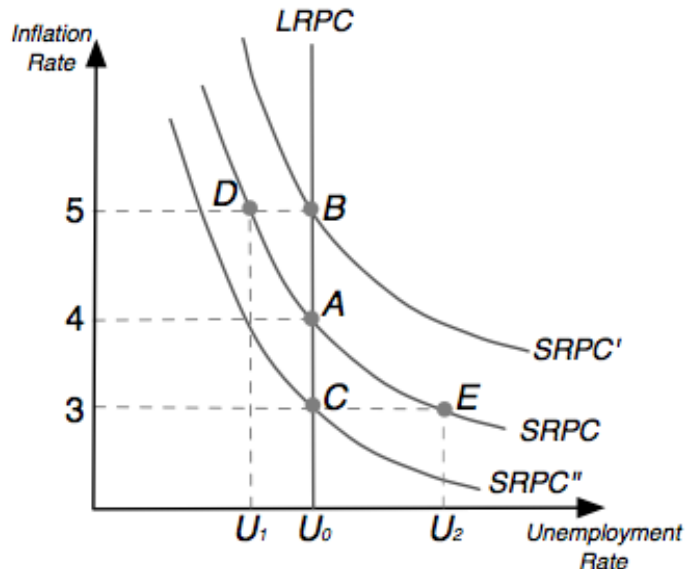
Suppose the economy is at Point A, an increase in money supply will move the economy to Point _ _ _ _ _ in the short run.

A) E
B) D
C) C
D) B

11. Which of the following is included in both the U.S. GDP and GNP?
(Ford and General Motors are American; Nissan and Toyota are Japanese brands).

A) The value of all cars produced by Ford in Mexico.
B) The value of all cars produced by General Motors in the US.
C) The value of all cars produced by Toyota in the US.
D) The value of cars produced by Nissan in Japan and the US.

12. The base year in the economy is 2002. If real GDP in 2003 using 2002 prices is lower than nominal GDP of 2003, then:

A) prices in 2003 are lower than prices in 2002.
B) nominal GDP in 2003 equals nominal GDP in 2002.
C) prices in 2003 are higher than prices in the base year.
D) real GDP in 2003 is larger than real GDP in 2002.

13. Consider the following SRAS-LRAS graph.
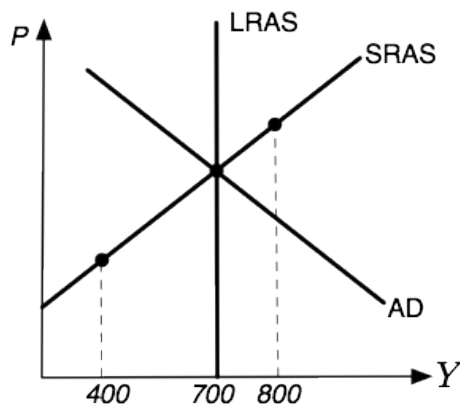
Which of the following statements characterizes an output level of $800?

A) It is sustainable over the long run without inflation.
B) It is achievable only in the long run.
C) It is attainable in the short run but it is associated with increases in the price level.
D) It can be achieved only if investment is independent of the interest rate.

14. The discount rate is:

A) the interest rate commercial banks charge each other for borrowing funds.
B) the interest rate commercial banks charge their new customers.
C) the interest rate the Fed charges commercial banks for borrowing funds.
D) None of the above.

15. Refer to the following graph.
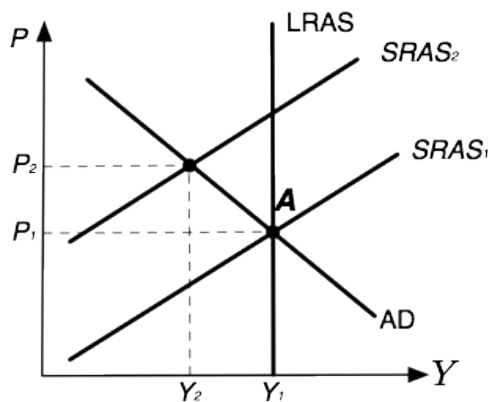
Assume the economy is at Point A. Higher oil prices shift the aggregate supply curve to $SRAS_2$. If the government decides to counter the effects of higher oil prices by increasing government spending, then the price level will be _ _ _ _ _ _ than P_2 and output will be _ _ _ _ than Y_2.

A) greater; greater
B) greater; less
C) less; less
D) less; greater

Part 2: True-False-Uncertain (15 points, 1 point each)

No partial credit.

For each question, circle either *True* or *False.* You do not have to provide an explanation.

1. The larger the Marginal Propensity to Consume (MPC), the smaller the Government spending multiplier.

        True   *False*

2. If discouraged workers were counted as unemployed, the measured unemployment rate would increase.

        True   *False*

3. When you take $100 from your checking account and deposit it in your saving account, M2 increases.

        True   *False*

4. If money supply decreases, then the interest rate will fall.

        True   *False*

5. If the inflation rate is higher than expected, borrowers benefit, lenders lose.

        True   *False*

6. If the Fed increases the required reserve ratio, Money Supply increases.

        True   *False*

7. The CPI somewhat overstates changes in the cost of living because it does not allow for substitutions that consumers might make in response to price changes.

        True   *False*

8. The amount of currency the Federal Reserve prints is equal to the income of the US.

   True   *False*

9. If the Government's primary target was balancing the budget instead of reducing the unemployment rate, recessionary periods would be shorter and less severe.

   True   *False*

10. If total US employment increased by 5 million workers, it must be the case that the total US unemployment declined by 5 million workers.

   True   *False*

11. $MPC + MPS = 1$

   True   *False*

12. The federal government debt increases whenever the federal government runs a budget deficit.

   True   *False*

13. In the US, business cycles have been symmetric, with expansions and recessions occurring at periodic intervals, lasting an equal number of weeks.

   True   *False*

14. Expansionary monetary policy tends to cause recessions.

   True   *False*

15. Whenever the aggregate supply curve intersects the aggregate demand curve the economy is producing full employment output.

   True   *False*

Part 3: Short-Answer Questions (25 points)

1. (5 points) In 2-3 sentences, describe a situation in which unemployment rate increases while the number of employed people increases.

2. (5 points) 2. Consider an economy going through a recession, with 2% frictional, 3% structural, and 4% cyclical unemployment rate. Draw the long run Phillips curve. Mark all axes.

3. Components & meaning of the GDP.

In 2005, the expenditures in Whartown were as follows:

	$ Billions
Durable Goods	500
Nonresidential Investment	300
Federal Purchase of Goods	400
Exports	300
State and Local Purchases of Goods	150
Residential Investment	100
Services	700
Imports	200
Change in Business Inventories	-50
Nondurable Goods	700

a.   (5 points) Using the above figures, compute the subtotals for each of the four major spending categories, and write the total GDP.

b. (5 points) Describe three factors that affect social welfare but which GDP does not measure.

4. (5 points) Interpreting the media.

In one or two sentences, interpret the following quoting from Bloomberg news: "Fed's Recovery Forecast Buoyed by Dudley Expecting Dollar-Driven Exports"

(Hint 1: Dudley is the Federal Reserve Bank Of New York President)
(Hint 2: Definition "buoy": cause to become cheerful or confident)

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Part 4: Problems (30 points)

Problem 1 (13 points): Calculating growth rate and inflation.

Assume the economy produces only two goods, X and Y. In this economy, Year 1 is the base year.

	Production			Prices		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Good X	100	200	200	$1.00	$1.50	$2.00
Good Y	110	100	150	$2.00	$2.00	$4.00

a. (3 points) What is the nominal GDP in Year 3?

b. (5 points) Calculate the growth rate in the economy between Year 1 and 2.

c. (5 points) Calculate the inflation rate in the economy between Year 2 and 3, using the GDP deflator.

Problem 2 (17 points): Equilibrium Output , Multipliers, SR and LR Policy Impact.

The spending in an economy is characterized by the following equations:

$$
\begin{aligned}
C &= 200 + 0.8Y^D \\
T &= 100 \\
I &= 200 \\
G &= 100
\end{aligned}
$$

a. (5 points) Compute the equilibrium value of GDP.

b. (2 points) What is the new equilibrium value of GDP if G is increased by 100?

c. (5 points) Using the AD-SRAS-LRAS graph, show the Short run and long run effects of expansionary fiscal policy.

d. (5 points) Suppose that the government increases its spending. Give 1 pro, 1 con of such an expansion. (You may assume that initially the economy was operating below its potential GDP)